

MANUFACTURERS' RECORD.

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

VOL. XXVIII. No. 2.
WEEKLY.

BALTIMORE, AUGUST 9, 1895.

\$4.00 A YEAR.
SINGLE COPIES, 10 CENTS.

Manufacturers' Record.

PUBLISHED EVERY FRIDAY BY THE
Manufacturers' Record Publishing Co.
MANUFACTURERS' RECORD BUILDING,
Lexington and North Streets,
BALTIMORE.

RICHARD H. EDMONDS,
Editor and General Manager.
C. R. MARCHANT, Business Manager.

NEW ENGLAND OFFICE—John Hancock
Building, 178 Devonshire St., Boston.
S. I. CARPENTER, Manager.

SPECIAL TRAVELING REPRESENTATIVES:
RICHARD S. EVANS,
I. S. FIELD.

SUBSCRIPTION, - - - \$4.00 a Year.
TO FOREIGN COUNTRIES, - - 26s. 6d. a Year.

BALTIMORE, AUGUST 9, 1895.

THE remarkable advance in the price of iron during the last two months and the continued activity in the iron market means very much for the South. The furnaces now in operation are making good profits, and there is now a fair prospect not only that every well-located furnace in the South will soon be in operation, but that there will be a good foundation for the building of more furnaces. The consumption of iron is steadily increasing, and the 10,000,000-ton notch of a few years ago must soon be largely increased. It is hardly unreasonable to look for a consumptive demand of 15,000,000 tons a year some time before the end of the century. This would mean a wonderful increase in furnace-building and iron and coal developments generally. The results of this prosperity in the iron trade will be felt in every part of the South.

Commendable Enterprise.

The enterprise displayed by the people of Tennessee in promoting the proposed Centennial Exposition is highly commendable. The action of the State legislature at its last session in refusing to pass an appropriation had a very discouraging effect, but a few who realized the benefits of such an exhibition have continued to work in its favor. The press, especially the Nashville papers, have kept up the agitation, and the result is that in addition to over \$100,000 pledged to aid the enterprise, an organization to carry it out is nearly completed. Mr. J. W. Thomas is president; Mr. A. W. Wills, commissioner-general; E. C. Lewis, director-general, with Assistant Commissioners J. W. S. Friereson, of Knoxville, and Robert Gates, of Memphis; treasurer, W. P. Trainer, and auditor, Frank Goodman.

The benefits of the exposition, if properly conducted, are too apparent to need to be detailed. Already the success of the Atlanta Exposition as an exposition seems assured, while as a means of attracting people from all parts of the country to Georgia it will prove a phenomenal success.

The Need and Opportunity for Diversified Employment in the South.

The people of the South have often been unjustly accused of lacking energy, when the idleness of some which furnished the excuse for this charge has really been due to a lack of opportunity rather than any lack of readiness to work. In a country sparsely settled as the South is, and with industrial interests only in their infancy, the opportunities to find employment of any kind have been very few as compared with other sections. Many have grown up in idleness because it was impossible for them to find work of any kind. It is because of this that the MANUFACTURERS' RECORD has persistently urged that it is the duty of every man interested in the people of the South to be interested in creating avenues for employment by developing railroad and manufacturing enterprises. The Staunton News, in a recent editorial discussing this situation, says:

"To increase the industrial activity of Staunton by establishing more manufacturing plants would add largely to the profits of dealers in all lines of trade; but, valuable as this would be, it's not the feature of greatest value to the city. What is of more importance is that it would open up opportunities for the boys of the city. At present there are only a few things which boys can go into. The professions are all crowded; we have an abundance of lawyers and doctors. Only a few can become clerks. Many take to railroad and electrical work, for these fields are open to them; but large numbers of our boys, necessarily it seems, walk the streets in idleness, because there is nothing for them to do. Many of them are bright boys and have a mechanical turn, and if they had an opportunity would rise to good positions in manufacturing establishments. As it is, they do nothing, and their parents feel a constant anxiety lest their idleness bring them into evil ways.

"The Northern towns, as a rule, have the advantage of us in this respect. They all have some sort of industries to which the youth may turn, and in which they may learn profitable trades.

"The parents of Staunton should keep these facts in mind when any sort of a discussion is going on with reference to some proposed new enterprise, and they should encourage its establishment if for no other reason simply because it will take off the streets a certain number of boys and make men of them by teaching them a useful and profitable trade."

What is true of Staunton is true of the whole South. For years the MANUFACTURERS' RECORD has been preaching the doctrine that every mill built, every furnace started, every railroad constructed

meant new opportunities for employment and new possibilities for the rising generation of the South. Idleness is death to advancement, morally, physically and financially, while employment means wealth for the individual and the country and all the comforts, conveniences and blessings which it brings. The people of the South must have the best opportunities for employment. How far short they now fall can be seen by a study of some comparative statistics. The Spy, of Worcester, Mass., has been studying the census figures bearing on this point, and the showing made indicates how little the South has accomplished in industrial development as compared with New England, but this very fact also illustrates the marvelous possibilities of industrial growth before the South. If New England, without natural advantages, has done so much, how great will be the wealth of the South, now that it is beginning to develop its vast mineral and lumber and cotton-manufacturing resources.

The following statistics from the tenth census give the number of manufacturing establishments, of persons employed, of wages paid and the value of goods produced, the latter including receipts from custom work and repairing. These statistics include all classes of mechanical and manufacturing industries from the least to the greatest, except mining and quarrying:

	No. establishments.	No. employees.	Wages.	Value of products.
Mass.	37,122	721,097	\$353,589,036	\$1,278,997,392
R. I.	10,334	117,259	\$31,733,715	\$141,219,151

Rightly considered, these tables tell a wonderful story. Massachusetts alone in her 8315 square miles of area paid to the 485,182 employees of her 26,923 industrial establishments wages aggregating \$239,670,509, and produced goods of the aggregate value of \$888,160,403. In that same year the three Southern States within their aggregate area of 142,295 square miles employed but 117,259 persons in their 10,344 establishments, and paid in wages an aggregate of \$31,733,715 for a total production of \$141,219,151 aggregate value; or, to put it in another form, the wages paid for a year in Massachusetts amounted to \$28,823 to a square mile, while the wages paid factory employes in the three Southern States amounted to but \$223 per square mile.

Rhode Island and Connecticut, with an aggregate area of 6240 square miles, have 10,199 manufacturing establishments, or 135 less than the aggregate of the three Southern States, but in these they gave employment to more than twice as many wage-earners, to whom were paid during the year \$113,918,527

for producing goods of \$390,836,980 value. This was equivalent to a distribution of \$18,256 per square mile among the working people of those two little States.

There is another view of this subject to be found in the statistics of savings-bank deposits, which practically represent the accumulations of wage-earners. The following gives the statistics for the two groups of States for the year 1892-93:

	No. of depositors.	Amount of deposits.
Massachusetts	1,663,489	\$593,613,584
Rhode Island	39,028	7,219,138

Of the New England depositors fully one-half are wage-earners in other than manufacturing industries, a considerable part of this part being domestic servants, but the deposits as a whole represent the savings of labor. This sum of nearly \$600,000,000 in those three States constitutes a fund from which solvent manufacturers, large or small, can at any time borrow what they need for a term of years at a low rate of interest. By its aid plants are enlarged or stocks of cotton or other raw materials are purchased for cash when prices are unusually low, and in a multitude of ways this vast accumulation of the savings of labor inures to the benefit of all industries. Thus the accumulations of individual and corporate capital are supplemented by the aggregate capital of labor.

Even comparing the city of Baltimore with the three States of North Carolina, South Carolina and Georgia, this city has over 100,000 hands employed in factories, whose wages aggregate over \$40,000,000 a year, while the value of products is about \$175,000,000 a year, against 117,000 hands, \$31,700,000 in wages and \$141,000,000 in product for the three States named. These figures indicate something of the wonderful future before the South. If it is doing as well as it now is and making such excellent progress, who can measure its future when it fully utilizes the great blessings given by nature as a foundation for vast wealth-creating industries. There is no danger of overdoing Southern progress, though there may be danger at times of overbooming, for it must take many years, even at the present rapid rate of growth, before this section can even equal New England's present industrial activities.

THE Southern Water Supply Co., of Atlanta, Ga., is now drilling under contract an artesian well for the Aiken Manufacturing Co.'s cotton mills at Bath, S. C., exclusively for the benefit of the employes. This is a wise move on the part of the Aiken Company.

Good water means good health, and manufacturing companies would find it profitable to spend sufficient money to secure the best water that can be had, and generally this is artesian water.

Improved Cotton-Baling.

There is to be no lack of cotton-baling systems before the South henceforth. Our readers are familiar with the progress of the Bessonette compress, which has passed into the control of some strong people, who promise to push this system very vigorously. The next system to ask public attention was one controlled by the Standard Roller Cotton Compress Co., of Little Rock, the head office of which is in Liverpool. It is understood that a large steamship owner of Great Britain, who was at one time reported as negotiating for control of the Bessonette, is handling this enterprise, and this explains the fact of its main office being in Liverpool. The latest company has been organized based on a press now in operation in Jackson, Tenn. This company has for its president Mr. J. G. Searles, of the American Sugar Trust, and for general manager Mr. Jerome Hill, a leading cotton factor of St. Louis. This company evidently ought not to lack for money nor for business ability to push it.

It is an interesting fact that all three of these compress enterprises are organized to introduce cylindrical bales in place of the present square bales. Apparently, they are backed by sufficient capital to guarantee that the cylindrical-bale project will be pushed with great energy, but whether the rivalry of three companies, each seeking to do the same thing in somewhat the same way, will bring about any legal complications remains to be seen. At any rate, it is to be hoped that the South will get the benefit of improved baling.

THE MANUFACTURERS' RECORD reported eleven cotton mills organized last week in the four States of North Carolina, South Carolina, Georgia and Alabama. South Carolina leads off this week with two more for the second dozen. At this rate the four States named would organize fifty mills in one month, which is a pretty fair rate for purely agricultural States. We are very much afraid, however, that the other three States cannot keep up the pace that South Carolina has set for them.—*Charleston News and Courier.*

Don't worry about your neighbors. If they let South Carolina run ahead on cotton mills, they are going to even it up on other things. North Carolina is going to keep in the race for progress by the development of its amazing mineral wealth, especially of the rarer minerals, now coming to the front, and by its fruit production and general advancement, and it may give South Carolina a lively pull for first place in cotton mills. Georgia may fall a little behind in the cotton race, but it will make almost as much money a few years hence out of its peaches and other fruits as out of cotton mills, and then it is leading the race for settlers from other sections. Alabama, it is true, is not building as many cotton mills as it ought to establish, but its people are doing some lively hustling in making iron, mining coal and getting ready to make steel, and in the final race for prosperity will give South Carolina a good chance to show its mettle. South Carolina is doing very well, but it can't do any boasting over its neighbors. They are too much in earnest.

A PROMISING OUTLOOK.

An Iron Expert Outlines the Business Prospects.

A Large Increase in Iron Consumption Predicted.

There are few men in the country better posted on iron and kindred matters than Col. A. M. Shook, of the Tennessee Coal, Iron & Railroad Co. In close touch with the industrial interests of the entire country, his views on business prospects are of unusual value. In discussing the outlook with the MANUFACTURERS' RECORD Colonel Shook said:

"The day that Congress adjourned marks the line of demarcation at the end of the great panic which commenced in 1890. About half the people of the United States were waiting until Congress adjourned, fearing it would do something; the other half waiting, hoping it would do something. The next day everybody realized the fact that at least for the near future nothing harmful could be done, nothing helpful would be done. This threw the country upon its own resources and everybody went to work. The result was that by the first day of April marked evidences of returning prosperity were visible in every direction. Four months have now passed, and when we take a retrospective view of the business revivals and improvements that have taken place during that period it seems very wonderful—not that prices have gone so high; not that there have been any extraordinary or unnatural causes to produce the revival, but the fact that in all lines there has been a steady, gradual improvement. The movement, starting as it did four months ago, has grown in volume and increased in momentum, until today it has practically touched every village and hamlet in America. The fact that it is so universal is the best evidence of its stability and its certainty to continue at least until we have passed the normal condition of business.

"The hope is that we may continue in the same gentle and general way for the next several years to come without creating a panic in any particular line of business.

"The iron business, with which I am most familiar, has been very marked for the uniform, gradual and continued expansion and the enlargement of the industry during the past four months. The increase in the volume of business was not particularly noticeable until about the 10th of April. On the 18th of April the first advance of twenty-five cents per ton was announced by the Southern furnaces. When the announcement was made, it was received by many of the consumers and a number of the producers with doubtful forebodings as to its propriety. So soon was this idea dispelled that again on the 22d of April, in order to check the overflow of orders, an additional advance of twenty-five cents per ton was made. Thirty days later a third advance was made. Consumption continued to increase and stocks decrease until the 7th of June, when a fourth advance of twenty-five cents was made. This did not check the consumption or the buying; in fact, everybody by this time had realized the fact that the panic was a thing of the past, and that we had again started upon an era of prosperity. On June 15 our fifth advance of fifty cents per ton was made. This not only did not stop the buying, but seemed to accelerate it. By this time the small industries, many of which had been shut down during the long night of depression, waked up and began to make arrangements to start their shops, foundries, mills, etc.; so rapidly did this transition take place that it became necessary on the 28th of June to make a sixth advance of \$1 per ton. The country received this advance with many doubts and fears as to the advisability of making it and the possibility of maintaining it. For about a week the question seemed suspended as to

whether it had been advisable or whether the advance was perhaps premature, when the Thomas Iron Co., of Pennsylvania, which has for thirty years been the acknowledged leader in the sale of pig iron in the United States, advanced its prices to correspond with the advances made by Southern furnaces, and gave as the reason that the Tennessee Coal, Iron & Railroad Co. had made a similar advance a week before. This was exceedingly gratifying to the South for two reasons: First, it established the wisdom of the policy of making the advance, and secondly, it recognized the fact that the South was leading in the movement. A month has now passed. Prices have been maintained, and all the furnaces have made sales fully equal to their expectations. The indications for a steadily-increasing consumption, and as a natural consequence, increased prices, has not been so manifest at any time since the revival started as it has been during the past two or three days. A larger number of consumers are urging shipments forward and pressing for earlier deliveries on old orders than at any time, and a larger percentage of the new orders that are taken are for immediate shipment.

"The corn crop of the South is made. The cotton crop promises to be fully up to the average. The fruit and melon crops are both enormous. Perhaps not for twenty-five years has nature been so lavish with her bounties as this year.

"The railroads have at last begun to realize the situation, and are placing their orders for equipment, and urging earlier deliveries on all contracts. We have had no summer dullness. In all lines the volume of business has been constantly increasing.

"It is not intended to make the impression that because this general wave of prosperity seems to be sweeping over the country, that prices are or will be abnormally high. The fact is we had gone so far below normal prices last spring that we have not yet reached the point above the prices of 1893 which were then denominated panic prices. This is noticeably true with the iron industry. Pig iron today is \$2 lower than in 1892 and \$5 lower than in 1890 and \$7 lower than in 1889, and at that time no one thought or claimed that pig iron and iron products were abnormally high.

"This is also true of production and consumption. Both production and consumption in 1890 and 1891 were about 10,000,000 tons annually. In 1894 the production fell to 7,000,000 and consumption to about 6,500,000. The indications now are that production this year will exceed 8,000,000, and that consumption will, if the present rates continue, exceed 9,000,000 tons, so that production and consumption today are not up to our average normal condition.

"If the rate of consumption per capita should continue as it has for the last forty years, it will require between 11,000,000 and 12,000,000 tons to supply the normal demand of this country at present. In order to produce this amount of iron it will require practically that all the idle furnaces now in existence should be put in blast. In other words, the present production must be increased 50 per cent. The contemplation of this for a moment will give some idea of the increased demand that will be made upon our coal mines, ore mines, coke ovens and quarries, to say nothing of the labor and transportation lines. I believe this view to be a very conservative one and still a very hopeful one for the South. Many statistical writers on the subject of production of cheap pig iron have for years contended that the old iron-producing centres had practically reached their maximum limit. Perhaps Sir Lowthian Bell was the first to say that the great ore and coal fields of Alabama, Tennessee and Virginia would be the

future iron-producing centres of America. This in turn was followed by the Hon. Abram S. Hewitt and the Hon. Edward Atkinson, both corroborating and emphasizing what Sir Lowthian had said. If any large percentage of this increased production that will be demanded to meet the increased consumption should come to the South, it will necessarily not only employ every furnace stack now standing idle, but will require a largely increased number to produce its pro rata of the increased requirements. I am willing to concede the fact that with the development of the Mesaba Range and the increased facilities for transportation that are being employed, that the great Northwest will largely draw its supplies from that source. But New England, Eastern Pennsylvania, New York and the South and West are the legitimate and natural territory to be supplied from the furnaces and mines of the South. The South and West will certainly increase as rapidly in wealth and population as any other section of the country, and the increased demands to supply this territory will be proportionately as great as that of any other section. This increase will necessarily bring with it a corresponding increase in labor, raw materials, transportation and everything else that enter into the cost of our product. This is natural and right that it should be so, so that everybody will participate in the benefits that are to be derived from this increased production and demand. It is better for the country that the day of cheap things and low prices is over. We are never so prosperous as when everything is high. This generation was born when everything was high. It has been reared and taught in that school. It likes the environments. Let the old world take its cheap labor and its low prices and commodities. Give us a good home market for our products, see that it is not invaded by foreign producers and cheap labor, and we will employ our native workmen at good prices and be prosperous and happy."

The Atlanta Exposition.

ATLANTA, GA., August 1.

Editor *Manufacturers' Record*:

The New York commission that came to Atlanta to pick the ground for and start the New York building at the exposition decided that this would surpass any exposition ever held in the United States except the Chicago Fair. The exhibits are beginning to come in. The seventeen great public buildings are nearly finished. The buildings of New York, Massachusetts, Illinois, Pennsylvania, Arkansas, Alabama and other great States are in process of construction. All of the leading countries of Europe will send individual exhibits. Mexico, the Argentine Republic, Chili, Paraguay, Venezuela, Honduras, Salvador, Costa Rica, etc., will send government exhibits, while Mexico has loaned her magnificent military band, of international fame, to the exposition, and will have a Mexican village covering three acres. A host of other national villages from all parts of the world will be located there also.

The Midway Plaisance or Heights will have everything of interest that was at Chicago, and a number of new novelties. In many respects the Chicago Fair has been improved upon. The United States government exhibit, in its handsome building, will be something extraordinary. The woman's building will be a marvel of interest and novelty, and the intercolonial display of relics will be magnificently historic. Every leading interest, city and State, and every business organization will have special days, and thus give a wide variety of interest to the exposition. As a very large attendance is expected, hotels are multiplying in number.

Thanks to the exposition and other features, Atlanta is entering upon a career of prosperity and power that cannot be estimated.

I. W. AVERY.

THE SOUTH TO THE FRONT.

[Special Telegram to Manufacturers' Record.]

ANNISTON, ALA., August 7.

We are advised that we have secured contract for 30,000 tons cast-iron pipe for Yokohama, Japan, for shipment during winter. Contract was secured in competition with foreign manufacturers.

ANNISTON PIPE & FOUNDRY CO.

This is without doubt the largest iron contract ever made by any American concern for foreign shipment. Thirty thousand tons of iron pipe against the world's competition! Alabama and the South may well boast. The South now takes the lead in driving for foreign trade, and the many predictions of the Manufacturers' Record, made years ago, that Southern iron would enter the markets of the world in competition with English iron, though ridiculed then, are being fulfilled now.

THE MANUFACTURERS' RECORD publishes today an interview with Hon. Hoke Smith, Secretary of the Department of the Interior, in regard to the outlook for business in the South, based on investigations made during his trip through Georgia and other Southern States. Secretary Smith presents a very glowing picture of the corn prospects and the general business and industrial advancement of the central South. What he says as regards this region seems to be true of the entire South. The corn crop is the largest which the South has ever produced; the yield of fruit and vegetables has been phenomenally great, and with good prospects for a fair cotton crop and profitable prices, the agricultural interests of the South have a most promising outlook. Added to all this is the unusual activity in all lines of manufacturing and mining. The MANUFACTURERS' RECORD commends to its readers the very interesting interview with Secretary Smith.

PROBABLY no more important announcement in railroad or manufacturing interests has been made for some years than the practical union, so far as working interests are concerned, of the Baldwin Locomotive Works and the Westinghouse Electric Co. While this is not a consolidation of these gigantic concerns, it is a business combination which must mean a wonderful impetus given to electrical matters as relates to transportation. The use of electricity for railroad purposes is commanding such attention that it is difficult to make any predictions in regard to the future, for we know not what an hour may bring forth in the rapidity with which electrical developments are following one after another. George Burnham, Jr., of the Baldwin Works, is quoted as saying:

The electrical locomotive of the future will not displace the steam locomotive for general railroad purposes, but its adaptability to use on elevated railroads will be shown in the near future. The new locomotive will require not less than 800 horse-power, and it can be increased to twice that amount.

THE steamship *Louisianan* sailed from Port Royal August 4 drawing twenty-five feet of water and carrying 3300 tons of phosphate rock, 525 tons of lumber and 800 bales of cotton.

SECRETARY SMITH ON THE SOUTH

An Attractive Picture of Increasing Prosperity.

GREAT CROPS AND DIVERSITY OF AGRICULTURE.

[Special Correspondence.]

WASHINGTON, D. C., August 7.

Hon. Hoke Smith, Secretary of the Interior, has recently made a somewhat extended tour through Georgia, where he has been addressing the people of his State on the financial question. He spent, all told, more than a week South, though he delivered only three addresses. These were made at very distant portions of the State, and gave him excellent opportunity for observing the condition of the country through which he traveled. He was very much impressed with the many evidences of returning prosperity to be found on all sides.

A representative of the MANUFACTURERS' RECORD called on the Secretary today and obtained from him an exclusive interview concerning the crop and industrial outlook in the South.

"I have never seen," said the Secretary, "the South look so prosperous, especially Georgia. Hard times are rapidly becoming extinct, and I believe that the Southern States are moving on to the most prosperous epoch in their history. Georgia farmers will make this year better corn crops and raise more meat than ever before. From present indications it is safe to say that the food supply raised in the State this year, if properly distributed, will not only be sufficient for the use of the people of the State for twelve months, but for two years. The corn crop is in better condition than it has been for years past, and well-informed farmers predict that it will exceed any former production in the State. It is probable that more hogs and better hogs are being raised this year than for many years previous.

"The raising of all food needed in the State is a new departure, but a wise one. It leaves cotton a surplus crop and proves the diversified possibilities of the soil, so inestimably valuable to farmers.

"Cotton," continued the Secretary, "is sufficiently advanced to insure a good crop. Nothing but most unusual climatic changes can affect it. While Texas is far behind on her quota, Georgia and the joining States will furnish an average yield. I also learned that the crop would be produced at less than usual cost. Southern farmers have had a pretty hard time of it for the past two or three years. Many of them have been unable to borrow money on their crops, and this fact, while it was severe in one way, makes the present crop freer from debts than heretofore. If anything like a fair price is received for cotton I feel certain that the Southern cotton-raiser will be in better shape than during the years when cotton was bringing much higher prices."

Secretary Smith is enthusiastic over the evident signs of prosperity to be found among the fruit growers of his State. "Georgia peaches," he said, "have a national if not an international reputation through this year's product. More peaches have been raised and marketed than ever before in the history of the State. They are large and juicy, and in the Eastern markets, I am told, have almost entirely supplanted the tasteless California peaches. Few people comprehend the magnitude of this industry in Georgia. One railroad system during the season has been hauling from sixty to ninety carloads per day in refrigerator cars from Georgia to Eastern points. These trains have run on lightning schedules, and made even better time than the vestibuled limited passenger trains. The only thing to mar the complete success of the peach crop this year has been an unfortunate disagreement with

the railroads as to the freight rates. I am not informed definitely as to the merits of the controversy, but am confident in the belief that the railroads cannot show too liberal a policy in their treatment of these fruit-growers, who, after all, are hardly more than pioneers in the great trade which is to be had from that source. This disagreement, however, has encouraged our peach-raisers to can their product. All over South Georgia canning factories are being erected, and those which have been put in operation thus far have been eminently successful.

"Georgia's famous watermelon has been shipped all over the country. The crop was a tremendous one, and in most parts of the State a profitable one. The watermelon is easily raised, and the quantity gathered from one acre is almost incredible.

"The grape industry in Georgia has not attracted so much attention as peaches and watermelons, but I believe that the Southern Piedmont section will, in a few years, give larger profits from grapes and wine than from all other fruits combined. Near Mt. Airy, at an elevation of 2500 feet, in North Georgia, a colony of Swiss bought a few years ago for comparatively nothing some red-clay hills. They had practically no capital, but these hills now are covered with grapevines, and their owners are making little fortunes from them. This section can furnish a claret better than that of California, and it is produced with profit, although sold at very low price."

The Secretary also noticed many evidences of industrial progress, and he believes that the industrial boom in the South, which was temporarily set back by the late panic, is on again. "Cotton manufacturing was never more successful in the South than it is today," declared the Secretary. "All through the cotton belt and in the Piedmont section new mills are being erected and old mills are being enlarged. Much of this I am glad to see is being done by home capital. I do not mean by this that Eastern capital is not desired, for it is not only welcomed, but necessary to the rapid and perfect development of the section. In many parts of the South capital does come from the East, and it is quite significant that New England cotton-manufacturing companies are building plants in various sections of the South. This is to be expected, for there they have the benefit of the raw material, with a perfect climatic condition for cotton manufacturing of every character. Not only cotton manufactories, but all other industries show certain signs of prosperity. In the Birmingham district of Alabama, the great coal region of the South, furnaces idle several months ago are now in full blast. Workmen in that section are again employed, and many of them at increased wages. All over the South the demand for labor is constantly increasing and at good prices. In the city of Atlanta I venture the assertion that there is not an idle workman who desires to be occupied. Never in that city's remarkable history has there been so much building, and the good effects of the coming Cotton States and International Exposition have not only already been felt in Atlanta, but for miles around.

"I look forward," continued the Secretary, "to the South's future with no fear. I believe in it more firmly than ever before. Conditions were never better for a return of a prosperity unexampled in the history of that section. If our people continue in their present conservative way much of the flow of Eastern capital which has hitherto traveled elsewhere will come to us. Unwise legislation might prevent this, but I do not believe such legislation possible. The place for a young man, an old man, a poor man or rich man willing to work, anxious to improve his fortune, is in the South."

Iron Matters in Georgia.

[Special Correspondence.]

ROME, GA., July 31.

The furnaces in the Chattanooga district are all in active operation excepting one, Citico, which has been undergoing repairs, but is soon expected to blow in. Rockwood furnace, 70x16, owned by the Roane Iron Co., is doing excellent work. It will be remembered that the two old stacks built in 1872 by this company have been dismantled and replaced by the new one now operating. Some of the material is on the ground for a second stack of the same size, but no active steps have yet been taken toward building. Dayton furnaces, 75x18, are both in operation, No. 2 having been put in blast recently. Chattanooga furnace, 61x13, leased by the Georgia Mining, Manufacturing & Investment Co., is going steadily. The repairs at Citico furnace, in Chattanooga, have been quite extensive. For some time past fear has been felt that the furnace would fall down. The foundations had given way and the stack settled so as to necessitate heavy props. On April 27 last it blew out. The lining was removed and holes were cut in the first ring of the shell, and through these 12x18-inch timbers were passed. These were supported on a block crib built on the hearth, and the other end on a similar crib resting on the ground about three feet from the excavation for the new foundation. The columns and mantle-plate were then removed, and the old foundation taken down on the edges. Then a new foundation of red brick set in cement and mortar was built up from the bottom so as to extend three feet six inches outside the cast-iron base-ring. The hearth and bosh were then put in up to the mantle-plate and the in-wall, of red brick thirteen inches, and fire-brick lining of shell then started on the mantle-plate and carried to the top of the bosh. The bosh was then finished and the lining continued to the top.

A steel jacket made of two five-eighths-inch steel plates riveted together, making a total of one and a-quarter inches, was placed around the hearth, reaching up to the coolers, and above these three rows of water-cooling plates have been set in the bosh, the first row just above the coolers and the other two rows at equal distances between this and the mantle. The furnace is now seventy-five feet high, seventeen feet bosh, ten feet six inches at tuyeres and thirteen feet at stock line. Fires were started July 15 to dry the furnace, and in the meantime repairs have been made to the stoves, boilers and other machinery. It is expected that the plant will be in blast before August 15.

Rising Fawn furnace, at Rising Fawn, Dade county, Ga., is in active operation and producing about ninety-five tons a day. Further down the Alabama Great Southern Railroad are the two Fort Payne furnaces, one still uncompleted, neither being in blast. At Gadsden both the coke and the old charcoal furnace are idle. The Gadsden-Alabama furnace, which was built in 1888, was at that time an excellent plant, but it has been operated in such a manner that from a casual examination it looks as though it would cost more than the value of the plant to put it in repair again. It is not probable that either this or the old charcoal furnace will be operated again.

The industries around Gadsden are in far better shape than might have been anticipated. The Elliott Car Works has recently completed a large order for cars, and has now started on another. The Union Furniture Manufacturing Co. is fairly busy, much of its work being on inside fittings for the large cotton factory being erected nearby. This factory will employ about 600 hands, and when it is completed, which will not be long, it will add greatly to the prosperity of both this town and Attalla.

At Round Mountain, Ala., the furnace

has been running for some time on cold-blast charcoal iron. This is one of the oldest plants in the State, having been built in 1853. In 1888 it was remodeled and its height increased to forty-five feet, the addition being an iron shell set on the original stone stack. Its output now, when using warm blast, is eighteen to twenty tons per day, and with cold blast from ten to twelve tons per day. The iron is one of the best known brands in the country and commands a high price and ready sale.

Preparations are being made near the Southern Railroad depot at this point to erect a large charcoal by product plant to yield 4000 bushels per day. It was originally intended to build this at Calera, and some of the machinery was on the ground there, but all is being moved to Round Mountain now, where the charcoal will be used both in the Round Mountain furnace and sent to the Rome furnace.

At Rome the greatest interest is centred in the erection of a \$500,000 cotton factory, now well under way. Most of the smaller industries are at work, and an unquestioned evidence of the improvement in business is shown in the largely-increased volume of trade noted by the numerous wholesale houses in the place.

An industry which is rapidly growing in this section is the raising of fruits and berries for the Northern markets. During this season one firm alone shipped over \$1800 of huckleberries to the North, and the total shipments of fruits and other farm products has amounted to many thousands of dollars.

Rome furnace is doing excellent work. This is the largest charcoal furnace in the South (65x12 feet), and its product has, especially during the last blast, taken high rank among the charcoal car-wheel chilling irons. Its output at present is from forty to fifty tons per day, using a mixture of red and brown hematites. H. S. FLEMING.

A MARKET IN JAPAN.

Opportunities for Cotton and Iron Producers.

Mr. Wm. E. Curtis, who is representing the Chicago Record in Japan, in a recent letter points out some interesting facts regarding the possibility of extending our trade relations with Japan. In his letter Mr. Curtis says:

"The only chance the people of the United States have to make money in this country is to furnish machinery and raw materials, such as cotton and iron, and the capital and experience for the establishment of manufactories here. Although we have the cheapest iron and cotton and the most plentiful supply of those two important commodities in the world, the manufacturers of Japan depend upon England for both, and this commercial phenomenon is difficult to explain, except by the ignorance and indifference of our producers. There is no cotton in Japan. There is some in China, India, Formosa and the East Indian islands, but nearly all of their product is absorbed by local industries. India, like Japan, will eventually become an importer instead of an exporter of raw cotton.

"There is only one deposit of iron in Japan of any extent, which lies in the northern island called Hokkaido. There is plenty of it there, such as it is, and it will do to mix with a better quality for some purposes, but used alone it is almost worthless. The owners of this deposit started blast furnaces some years ago, but built them for the use of charcoal fuel and very soon burned up all the timber in reach, when they had to suspend operations. The furnaces were recently rigged for coke and are again in operation, but their product is small and of a poor quality. There are limited deposits of iron on the southern islands which have been worked for ages. It was from them that the forgers in olden times got the material for the

beautiful bronze and the steel that has made Japan famous, but from a modern manufacturer's point of view these little mines are useless, and the greater part of the iron brought to this country comes in pigs from England and Belgium.

"I had a talk the other night with Mr. Amemiya Keijiro, who has been alluded to as the Jay Gould of Japan, because of his extensive railroad interests and his investments in various other directions. He is the chief man in nearly all the private railroad enterprises; he owns no end of coal mines, and his interests are so extensive and varied that one can speak of scarcely any enterprise without finding that he is a director or a shareholder in it. The manufacturing institutions with which he is connected consume nearly all the iron that is brought into the country, and he tells me the cheapest grade of pig costs thirty-two yen (\$16) a ton delivered in Tokio, and that first-class charcoal iron costs 120 yen (\$60 gold) a ton; the average price for all that is imported into the country is about \$40.

"This iron comes by sail or steamer from London and Liege, the freights being forty shillings a ton on the regular steamers and from twenty-five to thirty-five shillings on the tramps. The rate on iron from the United States by steamer and transcontinental railroad is usually \$15 or \$16 a ton, but very little is sent. I cannot ascertain at the steamship offices that there has been a shipment for years. The rate by sea from New York, Newport News or Pensacola by sailing vessels is usually \$6 a ton, while tramp steamers sometimes offer to take pigs at \$7 and \$8 in order to make up a cargo, but transactions are so rare that American iron is practically unknown in Japan.

"There is likely to be an immediate and unusual demand here for structural iron. The first iron building in Japan is now in process of construction and is the object of great curiosity. If it gives satisfaction the same material will come into general use because of its adaptability and earthquake conditions, and also because of the scarcity of stone, wood, clay and other building materials.

"One of the greatest needs of manufacturing industries in this country is the assistance skillful and experienced managers from America. Americans or other foreign superintendents can get more work out of the operatives than a native boss could ever do. The Japanese workmen have not been accustomed to the discipline that prevails in foreign factories and are inclined to resent its introduction by men of their own race, but they always expect it from a foreigner. The same number of men can accomplish at least 30 per cent. more under foreign than under native direction.

"There are unlimited opportunities for the establishment of manufactories of iron and steel in Japan. Almost everything that can be made of either metal, from a locomotive or man-of-war to a pair of tweezers or a tack, is now in demand, and the government will encourage the organization of companies, partially of foreign and partially of native capital, under foreign management."

The Iron Situation.

Col. Philip Henry Moore, of Wheeling, in an interview in the Pittsburg Post discussing the iron business, said:

"The situation is so peculiar as to be almost phenomenal, and it is somewhat hazardous to speculate on what may follow, but from a careful diagnosis of the situation, after comparing the elaborate data which I have collected each year for several years, I look for an unexampled demand for iron and steel in all its forms for the next two years at least, and it may continue much longer. The stocks have been exhausted, and the demand came on so sudden, and has been so cumulative, that there has been no time to anticipate de-

mand, and it is all the more remarkable because it was scarcely expected by the most sanguine. Prices are up to the point when imports of pig iron might almost be expected, but here again we find a condition which is as yet unexplainable, for we have been exporting pig iron to England. However, the advance here will stimulate prices there, and as the prices in the two countries maintain a parity, the British price plus the duty and the cost of transportation will prevent importations. We can, therefore, look ahead with confidence that our furnaces will be kept busy for some time. Prices in finished products have begun to move up in unison with the increased cost of raw materials, but those furnacemen who have no stock of ore will find it difficult to get it, because of the great demand from the larger plants, which buy heavily and whose trade will be given the preference.

"Another good thing is that sellers of all products are in a position to select customers, and those whose financial ability to pay promptly is questionable will find it difficult to get supplies, but the enormous demand will give them in turn an opportunity to demand quick payment, which will help them, and they will come out of the struggle with increased strength."

Colonel Moore accounts it a happy thing that the conditions which prevail are such that a presidential-campaign year cannot materially affect business. On this phase of the situation he said: "There are no indications from any quarter that any party is demanding further reductions of the tariff, and this factor has been one of the most potential business bugaboos in the past twenty years. Next year men will be in a position to pay no attention to the clamor of politicians and keep on at their business regardless of the clamor, because they know we are down to the point the free-traders have demanded, and that no political party will dare to upset stability by a renewal of an agitation which was damaging because the results were conjectural rather than material. Men were afraid because they had no actual knowledge as to what the results would be, and their fears prompted curtailment of operators and were communicated to others. The result of this was tremendous in the aggregate effect. Railroads hesitated to come into the market for needed supplies, and their business fell off to the dividend-paying point as a result. Now they are coming into the market because they must. Prospects of good crops and the dissipation of the silver craze as a sequel to reviving industry have given to the money men confidence, and new enterprises which have been held back for two years are now being carried forward, creating demand and helping to give an impetus which is wide-reaching in results. Reviving industrial and commercial activity is pushing the railroads to furnish better facilities, and they are coming into the market for supplies at a rate which still further accentuates demand. All these factors are cumulative, and when considered en masse give a condition which is difficult to see how it can be upset for some time. At present I can see nothing which is menacing to the continuance of activity, and I do not find any croakers in my contact with manufacturers.

"Machinery is in demand, foundries are busy, tinplate has advanced in consequence of higher wages in Wales, and this branch of the iron and steel trade, which was really in the worst position of any, is now looking up with the others. Altogether, I may say that so far as I can see we shall have enough to do to attend to business, and we may rest assured that any uneasiness which may be entertained regarding the money medium may be dissipated from our minds, and we may permit that question to be adjusted by the operation of the natural laws of commerce. Money is plen-

tiful, confidence is growing, and Europeans will come here to find profitable investment and thus help things along."

MODERN TRANSPORTATION.

Railroad Exhibits at Atlanta Showing the Progress of Southern Railways and the Country They Traverse.

One of the most striking features of the Cotton States and International Exposition at Atlanta will be the exhibit of Southern railroads. The progress made by these lines will be fully illustrated by comprehensive exhibits, but the most important point of their displays will be their exhibits of productions—agricultural, horticultural, mineral and timber—of the country traversed by them.

A few of the more important lines have furnished the MANUFACTURERS' RECORD descriptions of the exhibits to be made, which are appended:

Atlantic Coast Line Features.

The Atlantic Coast Line has accepted designs for a beautiful building of classical design, covered with staff and very handsomely ornamented. It has been located on the ground between the Fine Arts and United States Government buildings. This location is one of the most commanding on the grounds, overlooking the grand stairway, the plaza and the lake. It will house a comprehensive display of the resources of the South especially adapted to vegetable and fruit-growing as well as cotton lands. Specimens of all these products, as well as of the hard and soft woods, of which extensive tracts are adjacent to the line of the road, will also be seen. Mr. T. M. Emerson, traffic manager, has the matter in hand, and is making every effort to have the display complete in every particular.

The Southern's Elaborate Display.

The Southern Railway exhibition building will be a perfect architectural study of the colonial type, of an octagonal shape, containing about 2500 square feet of floor space. The exterior is composed of a main story of imposing height, above which is a clerestory with four pediments, covered with a spherical dome, giving the appearance of a two-story structure. The pediments and roof are surmounted at proper points with appropriate statues, giving the entire exterior an appearance that will command the attention and admiration of not only the artistic, but the unartistic eye. On the exterior of the main story, under the eaves, are panels of molded staff on all sides of the building, showing the progress of transportation in the United States, in proper historical order, from its most primitive stages to the perfection of luxurious travel and comfort afforded by the Southern Railway at the present time. The whole of the exterior is embellished with cornices, columns, friezes, etc., at just the proper points to give the structure its proper architectural lines.

The entrances to the building are under porticos, terminating in pediments which are supported by columns of massive classical design. These pediments are enriched by some handsome designs in staff, presenting in bold relief the monogram of the Southern Railway, so well known to the traveling public, which will be illuminated by a literal blaze of incandescent electric lights at night. On entering the building one will see before him a bureau of information, where capable employees will tell him anything in regard to transportation facilities to any part of the country he may desire. The walls of the interior will contain maps, drawings, photographs, specimens, curiosities, etc., clearly illustrating the progress in railroad construction, maintenance and operation, and the resources of the very rich, fertile and abundant territory through which the rail-

way passes. Special alcoves are placed in the sides of the building opposite the entrances, which are arched over at their entrance and lighted especially to show photographic views of localities especially adapted to manufacturing sites and industrial enterprises. In the top of the main story and clerestory are windows covered with handsome colored photographic transparencies, illustrating the superb scenery in North Carolina and other points in the South so well known. The spherical dome covering the clerestory will be paneled and molded in a rich manner and frescoed in harmonious colors.

The general construction of the building is of timber, covered on the exterior with staff and on the interior with plaster. The company will seek to make its exhibit and exhibition building a striking attraction of the exposition. The building was designed by Mr. Bradford L. Gilbert, the well-known architect, and will cost, completed, at least \$10,000.

The Plant System.

The Plant system exhibit building will be 100 feet square, sixty feet high, and surmounted by a flagstaff fifty feet high, from which will wave the flag of the Plant system. There are four entrances to the building, each eight feet wide and twelve feet high. In the interior is a room 100 feet square and twenty feet high, in which the exhibition of products from the sections of country tributary to the lines of the system will be made. At the top of this room is a belt or band of ground glass three feet wide entirely around the pyramid, which will give light to the room beneath. It will also be lighted by electricity. There will be in this building a relief map of peninsular Florida on a scale of two miles to the inch in distance and fifty feet to the inch in height, and pertaining to the exhibits of phosphate, their analyses and products. From South Carolina, Alabama and Florida will be a map on a scale of two inches to the mile, illustrating the location of the various phosphate mines and lines of transportation. There will also be a display of all the minerals found on the lines of the road. Cabinets will contain native woods, fibres and products thereof, and cotton, both Sea Island and upland. In addition to a full line of samples of naval stores, packages, barrels, etc., used in the manufacture thereof, will be a distillery in operation, illustrating the manufacture of rosin, spirits of turpentine, etc., in a space adjoining the building. The company will have exhibits from the various States of the lines of the Plant system of farm, garden and vineyard products. The building is placed upon brick foundations, and its framework is covered with cement, in which will be placed phosphate—rock and pebble—two sides of the rock from Florida, one side of rock from South Carolina and the other of pebble from Florida, the idea being that it is a pyramid of phosphate.

Miniature Steamships.

The North German Lloyd Steamship Co., one of the largest transportation companies in the world, with lines running to New York and Baltimore, has arranged to make an elaborate display of miniature models of some of its largest and most modern vessels. These models will show the wood and metal work of the vessels, and also the machinery, etc., used to propel them.

We are informed by Mr. Thurston H. Allen, of the Van Buskirk-McCafferty Co., that his company inserted a small advertisement in this magazine (*Southern States*) for the months of September and October, and had over 500 inquiries from farmers in the North and Northwest.—From editorial in Florence (Ala.) Herald.

If you want to reach the possible land buyers and investors in the North and West who are thinking of locating in the South, advertise in the *Southern States* magazine, published by the Manufacturers' Record Publishing Co., Baltimore, Md.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department, on page 32.]

An Old Story.

[MANUFACTURERS' RECORD, July 26.]

The New Orleans & Western.

A dispatch from New Orleans states that this company has begun work on the construction of its road and improvement of its terminal property. The plans of the company to build cotton compresses, a grain elevator, wharves, etc., in connection with a railroad from Battleground plantation to Avondale, were explained in a letter from Chief Engineer A. W. Swantz to the MANUFACTURERS' RECORD several weeks ago. A switch road has been run across to the Southern tracks, which run about half a mile from the Battleground plantation. Contracts have also been let for the erection of 500,000-bushel capacity elevator, which was awarded to James Stewart & Co., of St. Louis; also for the erection of the cotton sheds, which will cover twenty-two acres of ground. They will be built substantially, and provided with all the fire protections possible. A feature in connection with the road is that the engines which will be used about the sheds and yards will be patent pneumatic, for which contracts have been awarded.

The MANUFACTURERS' RECORD has frequently had occasion to call attention to dispatches which have appeared in daily papers relative to Southern matters a week or more after the same matter had appeared in its columns. The above is a fair sample. The details of the New Orleans project were published in the MANUFACTURERS' RECORD on July 25, given the Baltimore representatives of the Associated and the United Press and sent out by them, though the main facts were furnished them over a month ago.

The moral is plain—if you want to keep posted on Southern progress and want the first news of Southern projects, read the MANUFACTURERS' RECORD.

150 Miles an Hour.

The remarkable success of the electric locomotive of the Baltimore & Ohio system, which is hauling heavy freight trains through the tunnel in Baltimore unaided by steam, has proved that the electric motor for regular railway service is an assured fact. Another proof of this, however, is found in a dispatch from Philadelphia that the successful use of electricity as a motive power on steam roads has led the Baldwin Locomotive Works and the Westinghouse Electric & Manufacturing Co. to effect a combination. It is expected that the union of these two companies will result in the early introduction of improved forms of electric motors for standard railroads. The combination is to develop the possibilities of the Tesla motor as applied to the railway service, and according to an interview with an official of the company, to make it possible to ride from New York to Pittsburg in three hours. The Tesla motor, it is claimed, will draw a car at the rate of 150 miles an hour or more.

The cars will, it is said, be very light and on the principle of airships. The company can run them on a trestle that would not bear the weight of a Pullman coach, and intends to cross the mountains by lifts. It is only intended to use the lines for passengers, mail and express. There will be no engines, each car being provided with its own motor. Such is the outline of the scheme as given by one of the officers. If the companies succeed in putting their plans into practical execution

they will revolutionize the land transportation of the world.

Savannah to Montgomery.

In last week's issue the MANUFACTURERS' RECORD referred to the organization of the Georgia & Alabama Railway Co. and the election of its officers. During the past week Prest. J. Skelton Williams and several directors have been in Savannah arranging to secure property for wharf and depot purposes. They have obtained the Deptford wharf and other water front, and, it is stated, will be in a position to load freight from cars directly into vessels. In an interview President Williams is quoted as saying:

"An effort will be made to secure the fifty-eight miles of the Savannah & Western between Lyons and Meldrim. We intend to build anyhow the seventeen miles of railroad from Meldrim to Savannah, and have already purchased the steel rails necessary for the purpose. It is quite probable that the preliminary survey for this part of the work will be made within the next two or three weeks, and the building of the road will then begin at once."

The company, it is understood, has already made a contract for the construction at once of an eleven-mile cut-off between Richmond and Louvale, by which the distance between Savannah and Montgomery will be shortened by six miles, giving the Georgia & Alabama a line between Savannah and Montgomery eighty-two miles shorter than either the Central Railroad or the Plant system. The advantage of this in securing passenger and freight business is too evident to require comment.

The Southern-Southern Pacific Scheme

Relative to the statement in the MANUFACTURERS' RECORD of July 26 that a new trunk line from the Pacific to the Potomac river may be formed, the following dispatch is of interest:

"New York, August 3.—Negotiations are said to be pending between President Samuel Spencer, of the Southern Railway, and President C. P. Huntington, of the Southern Pacific Company, looking to the formation of a traffic alliance and the establishment of an all-rail route between Washington and San Francisco. It is stated that J. Pierpont Morgan has given his sanction to the scheme.

"The Southern Pacific now runs a direct line from New Orleans to San Francisco and Pacific-coast points. Its chief connection for Eastern points has been a line of steamers from New Orleans, known as the 'Morgan Line.' No effort has been spared by the railroad to turn as much as possible of its Eastern freight and passenger traffic to this water route, but shippers and passengers have not flocked to the 'Sunset Route' as it was expected, and to prevent this traffic from going and coming via Chicago the new deal is proposed."

Plans for a New System.

A report from Memphis, Tenn., states that Mr. E. H. R. Green, of Terrell, Texas, has been examining the Little Rock & Memphis road, extending between the cities named, with the view to purchasing the property when it is sold at auction in October. Mr. Green, who is the son of Mrs. Hetty Green the capitalist, is president of the Texas Midland, a line running through Northern Texas. It extends from Roberts to Garrett, Texas, with several short branches, one to Paris. Mr. Green proposes to build from Paris to Little Rock, and by securing the Little Rock & Memphis he would have a system reaching from Texas to Memphis connecting with several east and west trunk lines. The Texas Midland under his management is a model road of its kind, being laid with heavy rails and supplied with modern rolling stock. It is understood that Mrs. Green, also several Chicago parties, including A. M. Billings, a capitalist, will aid the venture.

CONTRACT AWARDED

For the Washington-Baltimore Electric Road.

It is stated that E. D. Smith & Co., of Philadelphia, have secured the contract for construction work for the double-track electric line between Washington and Baltimore. Several weeks ago the MANUFACTURERS' RECORD stated that Mr. Smith had had a conference in Baltimore with Messrs. B. N. Baker, John Hubner and other directors of the Columbia & Maryland Railway Co. with the view of securing the work. He has built most of the cable and electric lines promoted by the Elkins-Widener syndicate of Philadelphia, and is interested with it in a number of lines. The fact that he has obtained this contract indicates that it is extensively interested in the line.

The road will be laid with 80 pound steel rails and the company intends to build power-houses to develop at least 3000 horse-power. The trolley system will be used. Mr. Henry T. Douglas, of Baltimore, is chief engineer.

The company, which is promoting an electric line between Washington, Burnt Mills and Ellicott City, Md., claims that it has placed with a syndicate \$750,000 of its bonds to build the road, which is to extend from Takoma Park, near Washington, to Ellicott City, Frederick and Brighton, Md., in all about eighty miles. As announced in the MANUFACTURERS' RECORD several months ago, James R. Colegrove and George S. Chase, of Washington, are interested in the scheme.

Improving the Atlantic & Danville.

The present management of the Atlantic & Danville road, it is stated, is considering the question of increasing its revenue by assisting to develop the resources of the country it traverses. The line extends nearly east and west through Southern Virginia, with terminals at West Norfolk on tidewater, and Danville, one of the most extensive manufacturing cities in Virginia. Its president's attention is now enlisted in the cause of immigration, and the company proposes in the near future to establish an association for the furtherance of these measures, inviting the co-operation of influential citizens of several counties adjacent to the line of the Atlantic & Danville, with the view of advertising the many advantages of this section, describing the several localities, soil, climate, etc., with a list of the lands for sale, and in a general way to interest the public in the successful carrying out of its plans.

Under the management of President Newgass the outlook for the future of this property is very encouraging. Its freight traffic shows a gratifying increase, so much so that the company has added a large number of freight cars to its equipment. A number of passenger coaches have also been added to the rolling stock.

A dispatch from Norfolk states that President Newgass and his associates have a plan for extending the road west of Danville which may be presented to the English directors at an early date.

A dispatch from Portsmouth, Va., states that President Newgass has purchased about one acre of water-front on the harbor in that city, and that it may be used for terminals for the road.

Queenstown to Rehoboth.

Mr. W. H. Bosley, one of the directors of the Peninsular Construction Co., informs the MANUFACTURERS' RECORD that the company expects to let a contract for building the first section of the Queenstown & Rehoboth Railway from Queenstown to Denton, Md., on Saturday, August 10. The company has leased wharf property at Lewes, Del., for a terminus of the proposed line.

Railroad Notes.

THE Queen & Crescent system, it is stated, has ordered 100 box and fifty flat cars for its freight business.

MR. W. E. ROYSTER has been appointed traveling agent for the Mobile & Ohio, with office at Kansas City, Mo.

THE Rogers Locomotive Works has decided to display two of its modern locomotives at the Atlanta Exposition.

MR. W. S. KING has succeeded Mr. N. D. Wiggins as division superintendent of the Illinois Central system at Jackson, Miss.

MR. R. C. HICKS has been appointed general Western agent of the Central Railroad of Georgia, with headquarters at Chicago.

THE Nashville, Chattanooga & St. Louis has secured a lease of the Chattanooga Terminal road, which extends to a number of factories in Chattanooga suburbs.

FRUIT dealers in Charleston, S. C., have decided to establish a line of steamers between that city and the West Indies to replace the sailing vessels which are now in the trade.

A DISPATCH from Fort Worth, Texas, states that the different railway companies entering that city have determined to erect a union depot which will cost \$200,000. Citizens of Fort Worth will pay a part of the cost of construction.

THE plan of absorbing the Rock Creek Railway Co. by the Washington & Georgetown Railway Co., it is stated, will consist in the formation of a company to own both lines, to be known as the Capital Traction Co. and have \$10,000,000 capital.

W. G. McADOO, JR., of New York, is endeavoring to purchase a portion of the Knoxville (Tenn.) street-railway system recently sold at auction. The court has decided to withhold the decree of sale and to give Mr. McAdoo a chance to bid.

THE New Orleans representatives of the West India & Pacific Steamship Co., which operates a line of vessels between New Orleans, the West Indies and Europe, state that the fleet will be enlarged by adding two more ships this fall. They are now being built.

THE office of vice-president of the Queen & Crescent system is to be removed from Cincinnati to New Orleans. The Alabama & Vicksburg, New Orleans & North-eastern and Vicksburg, Shreveport & Pacific branches of the system will be operated from New Orleans.

T. E. BLANCHARD, of Columbus, Ga., has been appointed receiver of the Columbus Southern Railway Co. on the application of the Central Trust Co., holders as trustees of \$1,087,000 of bonds. The road extends from Columbus to Albany, Ga., about eighty-eight miles.

THE Plant Railway & Steamship Co. has decided to discontinue the offices of master of machinery and supervising engineer. These duties will be performed by the master mechanic and several general foremen. By the change several reductions in the working force will be made.

THE electric locomotive which has been tested on the Baltimore Belt Line division of the Baltimore & Ohio has been placed in regular service hauling freight trains through the principal tunnel of the line. The locomotive has been tested for speed, and hauled three cars up the 8 per cent. grade in the tunnel, which is 7330 feet long, in two minutes and thirty seconds.

A RECENT shipment of wool from Shreveport, La., to Boston amounted to 100,000 pounds.

THE MANUFACTURERS' RECORD is advised that the report that the Cumberland furnace has been sold to a New York syndicate is untrue.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department, on pages 30 and 31.]

Building Cotton Mills by Co-Operation.

THE MANUFACTURERS' RECORD is in receipt of a prospectus of the Newport News Cotton Manufacturing Co., organized with general offices at Richmond, Va., to build a \$500,000 cotton mill at Newport News. The officers of the company include some of the foremost business men and bankers of Richmond and Newport News, Mr. Lewis H. Blair, one of the wealthiest citizens of Richmond, being president; Mr. A. S. Buford, ex-president of the Richmond & Danville Railroad, vice-president, and Messrs. Smith & Elam, of Richmond, general agents.

In a very simple, plain presentation this prospectus sets forth the possibilities of cotton manufacturing in the South, pointing out the fact that although the South raises over 60 per cent. of the annual cotton crop of the world, it has only about 4 per cent. of the total number of spindles in the world. It presents extracts from letters from a dozen or more leading Southern bankers strongly commending cotton mills as one of the most attractive investments that can be made in the South, their reports being based on earnings made by mills in their respective localities.

This company has been organized on the building-association or co-operative plan which has proved so successful at several points in the South. Referring to this, the prospectus says:

"Several years ago a few people at Charlotte, N. C., decided to attempt to raise capital for building a cotton mill on the building-association plan. The value of such a system as this can readily be seen. It enables the South to furnish the capital for building its own cotton mills rather than wait on outside help. It stimulates the saving of money and furnishes a safe and profitable investment for the small sums that would otherwise be wasted, but which, aggregated in this shape, furnish capital for the construction of many mills. The first mill in Charlotte, started on this plan with a capital stock of \$100,000, proved so profitable that other companies were organized on the same basis, and it has now become a regular business, just as the organization of building associations."

A list of mills organized on this system is given. The prospectus then says:

"By means of this plan it is possible to secure the building of cotton mills at points where they could not otherwise, from lack of capital, be started. Besides establishing a factory, the company is practically a savings institution for the people. Regular and systematic saving is probably the best of all means to accumulate money, and at the same time to encourage the spirit of thrift and co-operation amongst the people of any locality."

The Newport News Cotton Manufacturing Co. has been organized on this plan with an authorized capital of \$500,000, par value of shares \$100, payable fifty cents weekly. The advantages of Newport News as a cotton-manufacturing point, its proximity to the cotton-fields and its ability to draw cotton by water as well as by rail, and the abundant water transportation facilities to Northern points, as well as to Europe, forever guaranteeing it freedom from high freight rates, are clearly set forth in this pamphlet.

In summing up this prospectus says:

"Heretofore small investors have not generally been able to share in the large profits made by cotton mills. Building associations and savings banks have been their only means of accumulating savings. By this system, so successfully introduced in the South, anyone who can lay aside even fifty cents a week can become a stock-

holder in a cotton mill. As funds accumulate under this system of weekly payments the contracts for the buildings and the machinery can be let without waiting for the final instalments to be paid in. Before the stock is all paid up the mill can be in operation."

The facts presented in this prospectus are of such general interest that the MANUFACTURERS' RECORD has quoted thus freely from it in order to show what can be done in the way of organizing cotton mills in the South. The importance of this co-operative system to the South, especially in the absence of savings banks, can scarcely be overstated.

A Projected Cotton Mill in Alabama.

An effort is being made to organize a cotton-mill company with a capital of \$200,000 at Jacksonville, Ala., the county seat of Calhoun county. Jacksonville is in one of the healthiest and most salubrious parts of Alabama. It has two competing lines of railroad, being on the East & West Railroad and the Southern Railway. The company was incorporated some time ago as the Union Cotton Mills. Gen. J. W. Burke, formerly of Cincinnati, but now of Jacksonville, and receiver of the Chattanooga Southern Railway, will probably be president, and George P. Ide, formerly of First National Bank, St. Johnsbury, Vt., and for four years past and now cashier of Tredegar National Bank, Jacksonville, Ala., is likely to be treasurer. The prospectus says:

"The town and its people will donate 100 acres of land directly upon the railroads, all the water needed for manufacturing purposes and suitable stone for building purposes. The water supply is unusually fine and abundant, being clear, pure spring water. By virtue of an act passed by the last State legislature, the company and all its property will be exempted from State and county taxes for five years, and the municipality will exempt it from all municipal taxes for the same time.

"For building purpose excellent brick are made in town, and can be bought at about \$4 per thousand; good hard pine lumber sells at from \$6 to \$8 per thousand feet; lime, forty cents per barrel, and labor of all kinds is as abundant and cheap as in any part of the United States. Brick can be placed in the wall at \$6 to \$6.50 per thousand.

"The best quality of cotton is produced in the immediate vicinity, and an abundant supply can be bought at the mill direct from producers, saving about one cent per pound in compressing, freight and commissions. Coal will cost \$1.30 per ton at the mill, making a very cheap steam-power, though it is thought that this can be reduced to \$1.15."

The Jacksonville people will make liberal subscriptions, but it is hoped to place the majority of the stock in the East. An inviting opportunity is presented to capitalists or Northern cotton-mill men to invest in this enterprise. General Burke or Mr. Ide will be glad to give full particulars.

Heavy Cotton Consumption.

Messrs. Atwood Violett & Co., cotton factors, of New York and New Orleans, in a letter to the MANUFACTURERS' RECORD under date of August 3 say:

"The New York Financial Chronicle shows another large loss in the world's visible supply of cotton of all kinds for the week, 138,000 bales, of which American 112,000 bales, and 151,000 bales of all kinds the previous week. Thus, 289,000 bales have been taken by the world's spinners, and therefore out of sight during the two weeks ending last night, of which 228,000 were American. This is the largest loss in any two weeks in the history of the trade, we believe.

"During the past week the Liverpool

stock was reduced 42,000 bales; Continental stocks, 34,000; American afloat for Europe, 10,000; United States port stocks, 23,000 bales; United States interior stocks, 6000 bales. The total in sight of this crop to date is 9,686,151 bales, against 7,385,480 last year. Our exports to date have been 6,686,306, against 5,166,279, an excess, therefore, of 1,520,000 bales, and yet the excess of European stocks of American and afloat for Europe is only 503,000 more than last year, showing that European spinners have taken 1,017,000 more of American than up to this time last year.

"In this country, while the excess in the crop over last year is 2,301,000, all that is left of it in warehouses at United States ports and interior points weekly reported is 96,000, showing that American spinners' takings and our exports aggregated 2,200,000 more than for the same eleven months of last year. Then again, if we deduct from 2,200,000 the excess of visible supply in Europe of American cotton over last year, we find that the world's spinners have taken 1,700,000 more than then, and if this does not prove the enormous consumption of American the world over and the necessity for a large supply out of another crop, which to us seems very improbable, it would be interesting to know what further evidences of proof would be required.

"Another thing worth attention is that this consumption, the largest on record, was in progress during one of the most serious commercial depressions ever known in this country, and during conditions certainly not favorable in Europe."

Six More Mills for the Carolinas.

Messrs. W. L. & E. C. Holt, of Burlington, N. C., have decided to erect another cotton mill. Contract has been let to Kirkpatrick Bros. for the building, which will be 100x152 feet in size.

Messrs. Gaston Baldwin, Rufus Bennett and James Ingram, all of Malee, N. C., have organized a company to erect a cotton mill in Richmond county. Mr. Ingram has been chosen president.

Mr. George H. Brown, of Statesville, N. C., who lately purchased the Buffalo Shoals water-power property, intends to erect a cotton mill on same and is organizing a company. Messrs. N. B. Mills, William Cooper and L. C. Wagner are interested, and the capital is proposed to be \$100,000. It is said that \$50,000 has been subscribed.

Messrs. S. M. Finger, J. C. Whitesides and others are organizing a company at Newton, N. C., to erect cotton mill, and it is said that over \$30,000 has been subscribed.

The Cora Manufacturing Co., of Haw River, N. C., will erect a cotton mill, and C. R. Makepeace & Co., of Providence, R. I., will be architects for same.

The Victor Manufacturing Co., of Greer Depot, S. C., has been incorporated to erect a cotton mill with capital stock placed at \$50,000 and privilege of increase to \$150,000. The incorporators are Messrs. M. L. Marchant, N. Cannon, J. H. Payne, D. Cannon, T. T. Westmoreland, W. M. Ballinger and others.

Large Additions to Mills.

The Swift Manufacturing Co. and the Hamburger Cotton Co., of Columbus, Ga., have just closed contracts for \$75,000 worth of new machinery and improvements for their plants. It was recently noted that these companies would enlarge, and now the work will be pushed to completion. The Hamburger plant now contains 3000 spindles, and the new addition will double its capacity. The Swift mill at present contains 9000 spindles and 369 looms.

Textile Notes.

MR. J. E. MOORE, of Temple, Texas, is corresponding with Northern and Eastern

capitalists with a view to erection of a cotton mill.

A MOVEMENT is afoot at Ocala, Fla., for a cotton-mill company, and C. J. Allred is interested.

THE capital stock of the Stanley Creek (N. C.) Mill will be increased to \$34,000 from \$20,000.

IT is said that a Maine cotton manufacturer has been investigating at Rome, Ga., with a view of erecting mill.

THE Portsmouth (Va.) Knitting Mill Co. has engaged Mr. C. L. Cone to purchase and install the machinery for its plant.

THE Greenwood (S. C.) Cotton Mill will add 5000 spindles to its plant, and has purchased nearly all the machinery needed.

DR. JNO. A. WYETH, of 27 East 58th street, New York city, is negotiating for a cotton mill to be located at Wyeth City, Ala.

SUBSCRIPTIONS are now being solicited for the proposed \$100,000 mill at Luling, Texas, lately reported. Mr. Otis McGaffey is interested.

THE Wadesboro (N. C.) Cotton Mill Co. is putting in 1600 new spindles, eight cards, slubber, speeder and other additional equipment.

THE Kentucky River Mills at Frankfort, Ky., has placed an order with James Leffel & Co., of Springfield, Ohio, for a 300 horse-power turbine wheel.

THE Forrest City (N. C.) Mill will put in additional machinery, including eighteen cards, 3000 spindles and looms for brown sheeting, etc. The plant is very busy.

MR. F. M. SNIFF, (care J. W. Carr, Pine Bluff, N. C.) will erect at Henry Shoals, near Pine Bluff, a 3000-spindle plant for manufacturing cordage and ball thread.

MESSRS. THOMAS & MOONEY, of Salem, Va., will engage in the manufacture of tidies, lambrequins, tablecloth, lap robes, showcase mats, etc., from wool and silk.

A \$100,000 mill is proposed at Toccoa, Ga., and W. A. Matheson, W. R. Bruce and R. D. Yow will organize a company. Over half the stock has been subscribed.

THE Enterprise Cotton Mill, of Augusta, Ga., has declared a dividend of 8 per cent., payable July, 1896. This is from the surplus earnings and distinct from regular dividend.

MR. WM. J. HOOPER, of Baltimore, Md., is removing to Mountain Island, N. C., machinery for the manufacture of seines, nets, etc. Mr. W. T. Jordan will manage the plant.

THE Montgomery (Ala.) Cotton Mills will put in its mill a 200 sixteen candle-power electric-light plant, besides 100 horse-power boiler, 250 horse-power engine, etc.

SUBSCRIPTIONS for \$85,000 have been received to the capital stock of the Selma (Ala.) Cotton Mill Co. As soon as the \$100,000 mark is reached organization will be effected.

MR. THOMAS M. SWIFT, president of the Swift Mills, of Elberton, Ga., has purchased site near Heardmont, and will erect a large cotton factory to be operated by water-power.

THE Union Cotton Mills, of Union, S. C., have just placed a large order for revolving flat cards and drawing frames with the Pettie Machine Works, Newton Upper Falls, Mass.

THE mill proposed at Hillsboro, N. C., is a spinning plant to have \$100,000 capital, and will be known as the Eno Cotton Mill. The incorporators are to be A. J. Ruffin and James Webb, Jr.

MR. J. C. RANKIN, of Mt. Holly, N. C., has purchased an interest in the Spencer Mountain Mill at Lowell, N. C., and changed its name to the Star Cotton Mills. About \$21,000 worth of new spindles will be put in.

THE new mill company, already reported, at Lumberton, N. C., will erect a building 60x200 feet and install 2500 spindles with necessary complement for spinning yarns. Mr. J. A. McAllister is secretary of the company.

A PARTY interested in cotton manufacturing while in conversation with a Columbus (Ga.) reporter stated that if the citizens of Columbus, Ga., would raise \$300,000 for a cotton mill, he would raise as much more.

THE Kestler Manufacturing Co., of Salisbury, N. C., reported last week as organized, will build mill at once. Mr. N. B. McCanless, president of the company, is architect for the building, and contracts will be let this week.

MR. T. M. JETT writes the MANUFACTURERS' RECORD that work is now in progress on the building for the cotton mill at Marble Falls, Texas. Messrs. J. H. & J. R. Barrett, of Henderson, Ky., are the main parties interested.

IT is proposed to build a mill at Meridian, Miss., and the Co-Operative Cotton Mills Co. will be incorporated, capital stock to be \$500,000. Among the incorporators are J. T. Chalk, Edwin McDowell, E. T. George, G. W. Meyer, G. S. Covert and others.

THE Fulton Bag & Cotton Mills, at Atlanta, Ga., has begun importing clay and bleaching chemicals from Europe by way of Savannah. A shipload of 1000 tons recently arrived for this company alone. It is an indication of the growth of its business.

MR. R. W. WILLEY, who has previously been in charge of the Bluff City Cotton Mills at Memphis, Tenn., is endeavoring to reorganize the company and put the plant in operation. It now contains 14,622 spindles and 252 looms. Mr. J. F. Graham is president.

MESSRS. HEATH BROS., of Monroe, N. C., have bought the Monroe mill for \$62,000, and will operate same, having incorporated a new company as the Monroe Cotton Mills, with a capital of \$75,000. The plant contains 6000 spindles and will be enlarged later on.

THE Crowders Mountain Cotton Mill, near King's Mountain, N. C., has commenced the erection of an addition 72x66 feet to accommodate the new machinery recently decided upon. The company will put in 1500 spindles for spinning its own warps; will also put in sixty more looms. Operations are now continuing day and night.

THE Golden Foundry & Machine Co., of Columbus, Ga., has secured orders for shafting and pulleys for the coloring department of the Griffin (Ga.) Manufacturing Co., and also for work for the Langley (S. C.) Manufacturing Co. These orders aggregate \$12,000, and were secured in competition with companies from different parts of the country.

THE Georgia Manufacturing Co., of Athens, Ga., has recently purchased some No. 80 cotton yarns, which are said to be the finest ever produced in the South. Capt. Jno. R. White, president of the company, is preparing for the Clarke county exhibit at the Atlanta Exposition yarns from No. 16 to 80, and expects to deeply interest some of the New England millmen.

THE entire capital stock of \$80,000 has been subscribed to the Bamberg (S. C.) Cotton Mill, previously mentioned, and charter has been granted. The plant is already completed, and E. R. Hays is president; C. B. Bradham, vice-president, and W. G. Smith, secretary, treasurer and general manager; directors, the above and J. D. Copeland, J. B. Black, F. M. Bamberg and H. C. Folk. Preparations will be made for commencing operations at once.

FINANCIAL NEWS.

A Good Record.

The Financial Index, of Atlanta, Ga., in commenting on the First National Bank of Gastonia, N. C., says:

"The First National Bank of Gastonia has a record of substantial prosperity of which its management may well be proud. It has not a single overdue paper nor overdrafts whatever, and has never lost a dollar in any way since its organization. Its statements show progressive increase in financial strength. March 5 loans and discounts were \$103,249.20; due from banks and cash on hand, \$32,457.22; deposits, \$57,137.94; due to banks, \$10,836.27; total resources, \$151,419.19."

This bank is located at one of the cotton-manufacturing centres.

Reducing Its Debt.

The Louisville & Nashville is about to reduce its funded indebtedness. A dispatch from New York states that the company has decided to call in outstanding 10-40 6 per cent. bonds, amounting to between \$4,000,000 and \$6,500,000, which are now subject to redemption. It has also decided to cancel the existing bonds of the Mobile & Montgomery Railroad Co., all of which are held by the Louisville & Nashville. It has sold to Kuhn, Loeb & Co., of New York, \$2,000,000 of its 4 per cent. gold unified bonds and \$1,000,000 of its 4½ per cent. mortgage 50-year gold bonds, issued as the joint bond of the Louisville & Nashville and Mobile & Montgomery companies and secured by a first lien upon the last-named road.

Elyton Company's Organization.

A report from Birmingham, Ala., states that the organization of the Elyton Company has been formally ratified by the Elyton Land Co., which it succeeds, and is now in full possession of the property formerly owned by the latter company. In carrying out its plans of reorganization the Elyton Land Co. has been materially assisted by the Maryland Trust Co. of Baltimore, which is trustee for its bond issue.

New Corporations.

William Beatty and others have opened a bank at Fairview, W. Va.

The Polytechnic Building and Loan Association of Tarrant County, Texas, has been formed with \$50,000 capital by E. J. White and others.

W. J. Simmons, president; M. S. Westheimer, vice-president, and others have organized the Hephtasophian Building and Loan Association at Norfolk, Va., with \$25,000 capital.

The Bank of Magnolia, Miss., has elected W. M. Lampton, president; P. H. Enochs, vice-president, and W. A. Gill, cashier. Stock certificates to the amount of \$18,000 have been issued and the bank declared ready for business.

New Securities.

The city council of Roanoke, Va., is considering the sale of \$12,000 in bonds to erect a schoolhouse.

The city of Columbus, Ga., is considering an issue of \$300,000 in bonds for building a water-works system.

The Guardian Trust & Deposit Co. of Baltimore has purchased \$10,000 worth of Caroline county, Md., 5 per cent. bonds at 101½.

W. M. Conner, W. A. Robinson and others have organized the Bank of Commerce at Hattiesburg, Miss., which will have \$100,000 capital.

The city of Montgomery has sold \$30,000 worth of 5 per cent. bonds to Seaman & Co., of Cincinnati, at 103½. This is the highest price ever offered for the city's securities.

The county commissioners of Charles county, Md., will sell \$20,000 worth of 5 per cent. bonds on August 13, the money to be used for building a courthouse at La Plata, Md.

The Washington & Georgetown Railway Co., of Washington, has decided to issue \$500,000 in bonds to complete the extension now in progress. Morris Adler, of Georgetown, is secretary.

An issue of \$300,000 6 per cent. refunding bonds has been sold to the First National Bank of Chicago by the city of San Antonio, Texas, for \$302,850, of which \$2500 is premium. The same bank has also taken \$200,000 in 5 per cent. sewer bonds of the city for \$204,138.90, being par and accrued interest.

Interest and Dividends.

The People's Loan & Homestead Co., of Galveston, has declared a 4 per cent. semi-annual dividend.

The Fidelity Trust & Safety Vault Co., of Louisville, Ky., has declared a quarterly dividend of 2 per cent.

The Enterprise Manufacturing Co., of Augusta, Ga., operating one of the largest cotton mills in the South, has declared an 8 per cent. dividend.

Financial Notes.

THE Union Trust & Guarantee Co., of Little Rock, Ark., has reduced its capital from \$100,000 to \$50,000.

THE Associated Banking & Trust Co., of Knoxville, Tenn., has changed its name to the Union Bank of Knoxville.

MR. WILLIAM BERNEY has been appointed vice-president of the Bank of Montgomery, Ala., in place of R. F. Ligon, Jr., who has resigned.

THE city of Petersburg, Va., has redeemed its issue of \$194,000 8 per cent. railroad bonds by money received from the sale of 5 per cent. bonds.

THE increase in business at Savannah, Ga., is well indicated by the bank reports. One week's clearings recently were 55 per cent. greater than during the same period in 1894.

THOS. PLATER & Co., of Nashville, Tenn., have purchased \$90,000 in bonds of Nashville street-railway companies at par and interest, it is reported, for the Vanderbilt University as an investment.

Testing Carolina Gold Mines.

CHARLOTTE, N. C., July 30.

Editor Manufacturers' Record:

I am endeavoring to open mines in this vicinity, and then becoming associated with capital to further develop and open them on a paying basis, my object being to spend very little money until the showing of mineral warrants it. I have had a practical experience in Colorado dating back to 1881 in opening and developing mines and prospects.

At Charlotte we have partially opened the Frazier mine, which shows very good ore. We have put in a six-inch Cornish pump and will soon put in a twenty five horse-power boiler and another pump in No. 2 shaft. We have also been doing development work on the Hunter and the Vanderburg mines. The Hunter shows good ore, with very little expenditure. There are other mines that in my opinion would show great possibilities with a few hundred dollars. This is certainly one of the most promising fields for legitimate mining which it has ever been my good fortune to run across. The difficulties have been: First, the people here don't know how to mine; second, when they reached water, which is generally strong, they struck sulphides and could not treat them. Now that chlorination and other processes will handle that, it seems success is assured.

A. F. GWIN.

The demand throughout the lumber market continues unusually active, and there seems to be no let-up to the number of orders received daily. The movement is most marked in yellow pine, and the majority of millmen think that trade will continue good until late in the fall. Crop reports received continue very favorable, and it is expected that large orders for lumber will come from sections that have purchased but little the past two years. The white-pine trade, while not of great volume, continues to improve. Country yards are already commencing to increase

their stocks in anticipation of an active demand in the early fall. Prices continue firm without change, but the recent advance in the North has tended to harden prices. The demand for furniture and railroad stock is good, with some activity in wagon and agricultural-implement stock. There is a better movement in white oak, both plain and quartered, with stocks of dry stuff light. The demand for dry red oak is brisk, with a fair supply and prices firm. There is a steady demand for ash from the local car works, but all orders for sound lots have been filled. The demand is also fair for certain grades of ash from implement manufacturers. Poplar is rather dull at the moment, with a slight demand for firsts and seconds, with low grades not wanted. Upper grades of walnut are in good request, with stocks very light, while common grades are plenty and slow sale. Other hardwoods are quiet and unchanged.

Lumber Notes.

THE Kentucky Lumber Co.'s mills at Williamsburg, Ky., were burned on the 2d inst. The origin of the fire is unknown. The loss is estimated at \$50,000; insured for \$25,000.

THE large lumber and planing mills belonging to W. C. Albertson, of Tusculana, Miss., were completely destroyed by fire on the night of the 20th ult. The estimated loss is \$75,000.

THE receipts of lumber at the port of New Orleans for the week ending July 31 were 1,161,000 feet, and since September 1 they amount to 75,826,490 feet, against 70,670,651 feet last year.

THE Standard Barrel Co., of St. Louis, was incorporated last week. The incorporators are Peter Honeff, Samuel A. Whiteman, Many B. Bick and John Bick. The capital stock is \$12,000.

THE lumber mills at Jasper, Fla., and at points adjacent are all working on full time, with plenty of orders ahead. Prices are low, but with plenty of orders in the market purchasers are not so severe on inspection.

THE lumber business of Fernandina shows considerable improvement, and during the month of July over 3,000,000 feet of lumber was shipped. There are now in port nine vessels and three outside, with several new charters for the current month.

THE Stowers Furniture Co., of Birmingham, Ala., was incorporated last week with a capital stock of \$20,000 by G. A. Stowers, of San Antonio, Texas; J. W. Fain and R. Strickland, of Birmingham, and W. P. Clower, of San Antonio, Texas.

THE B. & K. saw mill at Warren, Tyler county, Texas, made one of the best cutting records last month of any mill on the Sabine & East Texas Railroad. The B. & K. mill worked twenty-five days in July and sawed 2,264,000 feet of lumber, an average of nearly 91,000 feet a day.

LUMBERMEN at Catlettsburg, Ky., state that the timber run in the Big Sandy river is ended, and in all there will not be more than 200 rafts. Most of these belong to the larger companies, who have men in the upper stream constantly ready to take advantage of any rise.

IN lumber and crossies the shipments from Brunswick, Ga., for July show up comparatively well. The total domestic shipments of lumber amounted to 6,487,000 feet, crossies 79,971 and shingles 22,200. The foreign shipments were 532,000 feet of timber, 1,645,000 feet of lumber and 15,000 shingles.

MESSRS. CHESTERMAN & CO., of Richmond, Va., the firm to whom was awarded the contract for building the new Southern freight depot, have contracted with Messrs. Pierce, Akers & Mosby, of Lynchburg, for supplying the lumber. The contract calls for 400,000 feet, which will be procured

from points in South Carolina, Georgia and other States.

THE Whitmer-Lane Lumber Co. has established one of the largest saw-mill plants in West Virginia at the new town of Horton. The mill is now cutting 85,000 feet of spruce lumber per day, and, it is stated, will increase its output in a short time to 150,000 feet. The supply of timber in the vicinity is very large.

THE Loomis-Hart Manufacturing Co., of Chattanooga, Tenn., received last week about 150,000 feet of timber on the recent rise in the Tennessee river. It is expected that 1,000,000 feet will come out on the rise. The saw-mill department of the above company resumed operations on Monday last with a full force of men.

THE board of education of North Carolina, at a meeting last week in Raleigh, gave Mr. W. G. Burkhead, representing Messrs. Camp & Co., an option on certain lands in Brunswick and Columbus counties at twenty-five cents an acre. The option continues until the end of the year, and embraces several swamps having a dense growth of cypress. The swamps will be drained by canals dredged to the Wacamac river, and will be cleared up and sold to small farmers.

THE shipments of lumber from the port of Jacksonville, Fla., for the month of July showed a considerable increase over those of the previous month. The lumber trade generally of that port showed a great improvement in the demand, with a firmer tone in prices. The coastwise shipments for July were 6,228,800 feet of lumber, 18,400 bundles of shingles and 26,800 crossies. The foreign exports were 237,922 feet of lumber, 26,950 shingles, 1000 crates and 550 pitch-pine poles.

THE following vessels cleared last week from Jacksonville, Fla., with lumber and its products: Steamer Iroquois for New York with 500,000 feet and 2000 bundles of shingles; schooner Isaac N. Kerlin with 338,000 feet, and schooner Normandy with 430,000 feet, also for New York; the schooner James Hartman cleared for Nassau, New Providence, with 20,686 feet of yellow-pine lumber and 26,950 shingles; the schooner Hester A. Waters cleared for Baltimore with 300,000 cypress shingles.

THE Southern Pine Co. of Georgia with a capital of \$1,250,000 was organized at Savannah on the 5th inst. It is composed of the lands and timbers and properties of Stilwell, Millen & Co. and J. J. McDonough & Co., of Savannah; the James K. Clark Lumber Co., of New York; Henry Talmadge, trustee, and Loring R. Miller & Co., of New York city. The offices will be in New York, Savannah, Ga., and Darien, Ga. The following officers were elected: President, H. P. Talmadge, of New York; secretary, W. B. Stilwell, of Savannah; treasurer, C. C. Southard, of New York.

Iron Markets.

CINCINNATI, August 3.

The past week has brought some indications of the return to the activity in buying that prevailed in May and June. Several classes of buyers have been holding off for a month past. They are, first, the ones who covered their requirements fully at low prices, and have heavy contracts running. Some of the largest buyers are in this list, but their contracts are running out, and deliveries for the most part are taken more rapidly than was indicated when the orders were placed. Second, the buyers who have not had full confidence in the advance, and who have looked for lower prices in the fall. These have based their expectations largely on the current talk of many new furnaces going into blast, heavily increasing the output of iron. The fallacy of this expectation we have pointed out a number of times. Third, the consumers whose own business has not responded to

the general improvement, and who do not wish to buy speculatively.

All three of these classes are swinging around to active buying again, and there is reason to believe that before October 1 a great deal of new business will be placed. The demand when it comes will have to be met by furnaces that are almost without exception heavily oversold, and who would prefer to see things rather quiet until their order books are run down to some extent. There seems to be not the slightest doubt but that the current rate of consumption will take all the iron that can be made by furnaces in the United States between now and January 1, and all that can be spared from stocks. If there should be any considerable addition to consumption in the fall a scramble for iron would be almost certain to result.

Under such conditions prevailing it is not strange that makers both North and South are very strong and independent in their views, and even at full schedule prices, rather prefer not to take orders. The somewhat extraordinary spectacle is presented of furnaces and their agents referring buyers to rival producers with the aim to divert business.

The approach of the season when rolling stock is fully employed in the movement of the cotton crop in the South and the big grain crop in the West suggests possible inconvenience to buyers, who continue to run on the favorite hand-to-mouth policy that has prevailed for the past three years. Nearly all furnaces and furnace representatives are in more or less trouble, because of inability to fill orders according to the requirements of their trade. Charcoal irons, which have been so slow to respond to the general upward movement, have felt the influence decidedly the past week. The Lake Superior furnaces are understood to have advanced their figures under some concert of action. The Hinkle furnace advanced last week to \$14 at lake ports. Southern car-wheel irons, which have been so long neglected, are again in good demand, and the leading furnace now in blast, Rome, has its products sold for three months ahead.

The market closes firm on the following basis of quotations, which are cash f. o. b. Cincinnati:

Southern coke No. 1 foundry.....	\$12 00@12 50
South. coke No. 2 foundry and No. 1 soft.....	11 50@12 00
Lake Superior coke No. 1.....	14 00@14 50
Lake Superior coke No. 2.....	13 50@14 00
Hanging Rock charcoal No. 1.....	16 00@17 00
Tennessee charcoal No. 1.....	13 50@14 50
Jackson county silvery No. 1.....	14 00@15 00
Southern coke, gray forge.....	11 00@11 50
Southern coke, mottled.....	10 75@11 00
Standard Alabama car-wheel.....	15 25@16 25
Tennessee car-wheel.....	14 50@15 00
Lake Sup'r car-wheel and malleable.....	15 00@15 50

CHICAGO, August 3.

This has been a quiet week both as regards sales and inquiries. The most prominent feature has been the awful clamor by customers who are unable to get iron on their contracts as fast as needed. This trouble exists with local furnaces even more than with Southern, and no remedy appears in sight. Large as well as small buyers have gotten into such a habit of carrying light stocks during the past two years that now when furnaces are short of all grades and behind with shipments they think they are being neglected and that some other fellow is getting his supply promptly while they are obliged to suffer. In some cases foundries have been compelled to shut down for lack of iron. The regular daily quota of small orders has continued through the week, but no large deals are in sight at this writing. The Hinkle Lake Superior charcoal brand has been advanced.

We quote for cash f. o. b. Chicago:

Southern coke No. 1 soft & No. 2 fdy.....	\$12 50@12 75
Southern coke No. 2 soft & No. 3 fdy.....	12 25@12 75
Ohio Scotch softeners No. 1.....	13 50@14 00
Lake Superior charcoal Nos. 1 to 6.....	14 00@14 50

We quote for cash f. o. b. St. Louis:

Southern coke No. 1.....	\$12 50@12 75
Southern coke No. 2.....	12 00@12 25
Southern coke No. 3.....	11 75@12 00
Southern gray forge.....	11 75@12 00
Southern charcoal No. 1.....	14 50@15 00
Ohio softeners.....	14 00@14 50
Lake Superior car-wheel.....	14 50@15 00

Southern car-wheel.....	16 00@16 50
Genuine Connellsville coke.....	4 75
West Virginia coke.....	4 75

BUFFALO, August 3.

We have to report this week that sales have been above the average. The business for the month just passed has been a trifle above the average as far as sales are concerned. Shipments have been heavier, and foundries are waking up to the fact that they must carry more stock. Several have had to place additional orders for pig iron to cover the increase in consumption. One of the local furnaces has been forced to advance the price on all grades 50 cents per ton, and say they may be obliged very soon to withdraw from the market until they can catch up with their orders. A few round lots of Southern iron have been offered in this territory and immediately snapped up by those who have not been able to get iron shipped on existing contracts. Lake Superior charcoal furnaces are stiffer in their views, and one of the leading Lake Superior charcoal furnaces has advanced their price 50 cents per ton. This is an advance of \$2 per ton over the lowest point reached.

We quote for cash f. o. b. Buffalo:

No. 1 foundry strong coke iron Lake Superior ore.....	\$14 25@14 50
No. 2 foundry strong coke iron Lake Superior ore.....	13 75@14 25
Ohio strong softener No. 1.....	15 75@16 25
Jackson county silvery No. 1.....	14 00@14 50
Lake Superior charcoal.....	15 50@16 00
Southern soft No. 1.....	13 50@14 00
Hanging Rock charcoal.....	18 50@19 00

We quote for cash delivered Boston:

Alabama No. 1 foundry.....	\$14 00@14 25
Alabama No. 2 fdy. and No. 1 soft.....	13 50@13 75
Alabama No. 3 fdy. and No. 2 soft.....	13 25@13 50
Alabama No. C. C. car-wheel.....	18 00@18 50
Strong L. S. coke iron No. 1 foundry.....	15 50@16 00
Lake Superior charcoal car-wheel.....	16 50@17 00
American-Scotch (Northern) No. 1.....	15 50@16 00
Jackson county silvery No. 1.....	17 00@17 50

NEW YORK, August 3.

Quietness prevails here this week. Nine-tenths of the pig iron buyers are taking a much needed rest. They are enjoying themselves in a self-satisfying way, and will return to their respective posts ready for the fall campaign, which promises to be normal, to say the least. The situation now and a year ago varies more than our fondest hopes led us to believe it could.

We quote for cash f. o. b. New York:

No. 1 standard Southern.....	\$13 75@14 00
No. 2 standard Southern.....	13 00@13 25
No. 1 standard soft.....	13 00@13 25
No. 1 foundry lake ore coke iron.....	14 75@15 25
No. 2 foundry lake ore coke iron.....	14 25@14 75
Lake Superior C. C.....	15 25@15 50

PHILADELPHIA, August 3.

The iron and steel market still shows great strength. Sales this week are light and material offered still lighter. It looks as though we would soon witness an iron famine.

We quote for cash f. o. b. Philadelphia:

Standard Alabama No. 1 N.....	\$13 75@14 00
Standard Alabama No. 2 N.....	13 00@13 25
Standard Southern No. 1 soft.....	13 00@13 25
Lake ore No. 1 N.....	14 75@15 25
Lake ore No. 2 N.....	14 25@14 75
Lake Superior charcoal.....	15 25@15 50

ROGERS, BROWN & CO.

A RECENT order of canaigre root for tanning purposes was received by a firm in Dallas, Texas, from Samuel Baker & Co., of Manchester, England, who will send it to Capetown, South Africa.

THE MANUFACTURERS' RECORD is informed that the Virginia Coal & Iron Co., of Big Stone Gap, Va., which was reported in a recent issue as building five miles of railway in order to connect its proposed coke-oven plant with the Louisville & Nashville Railroad, has \$300,000 of available cash to expend in developing its coal property. It is proposed to build 200 coke ovens this fall, and to increase this number in the spring to 500.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises and needing machinery or supplies of any kind will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

MECHANICAL.

Electric Railway Without Trolley.

What is said to be the first practical electrical underground conduit railway in this country is now in operation in New York city, and will shortly be connected to the great cable traction system of the Metropolitan Traction Co. The underground electric system employed differs radically from all other systems of electric underground conduit railways, both as regards the construction of the conduit itself and the method of taking the current from the conductors for the motors. It has been

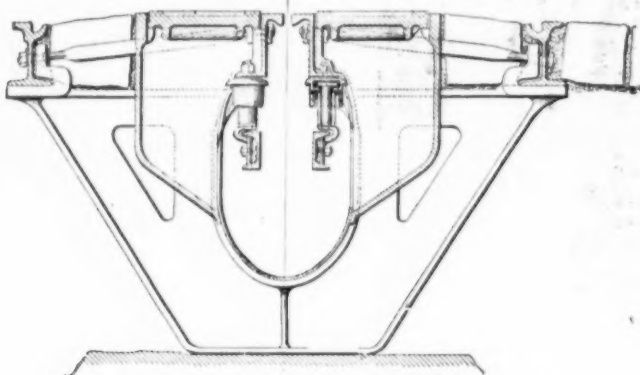


FIG. 1.—SECTION OF CONDUIT—INSULATOR SUSPENSION.

operated more or less experimentally for the last month, and its success has justified the sanguine predictions of the electricians and engineers who effected the installation.

The introduction of this system upon the surface lines of New York is the result of the determination of the Metropolitan Traction Co. to give the city a satisfactory electrical system of propulsion which would not be the subject of that peculiar popular prejudice which has acted to debar it from the advantages of the overhead trolley system. Consideration of the question resulted in the selection of a conduit system designed and manufactured by the General Electric Co., and the long stretch of road

and expense have been omitted to render the installation and operation successful.

The power-house is a temporary frame structure, with a sheathing of corrugated sheet iron. The present power plant consists of two 650 horse-power engines and two 400-kilowatt generators. Steam is supplied from two Babcock & Wilcox water-tube boilers arranged in one battery. Each has a rated capacity of 250 horse-power, furnishing steam at 120 pounds. The engines are horizontal cross-compound Allis-Corliss machines, which during the experimental trips will run non-condensing. All the steam piping is placed beneath the floor of the engine-room. To each of the

engines is coupled a General Electric 400-kilowatt generator of standard construction, but wound for 350 volts instead of 500 volts, as is the usual practice in railway work. This machine is placed between the high and low-pressure sides of the engines.

From the generators the cables run beneath the sidewalk on 146th street, extending as far as Lenox avenue, where they are introduced into the five-inch iron pipes running parallel with the conduit. For the present the line will be operated directly from the power-house, but the feed wires will probably be placed in the pipes and will be

from the centre of the slot to avoid deleterious effects of any drip, which would otherwise reach them, and are of channel iron four inches deep and thirty feet long. They are suspended from the ceiling of the conduit by means of insulators devised for this especial purpose, and are at a depth of thirteen inches below the conduit slot. Each conductor is sufficiently rigid to require suspension at the ends and centres only, and the ends being located in the manholes, and handholes being placed at

Every twelfth manhole is connected with the power-house by telephone. Quick brake switches are located at intervals in these manholes in order that any section of the line may be cut out in case of trouble or accident. At the track switches each conductor is provided with a flaring nose to facilitate the entrance of the plow into the conductors. The manholes in which the insulators are placed are four feet four inches in depth, four feet in length and fourteen feet five and one half inches in

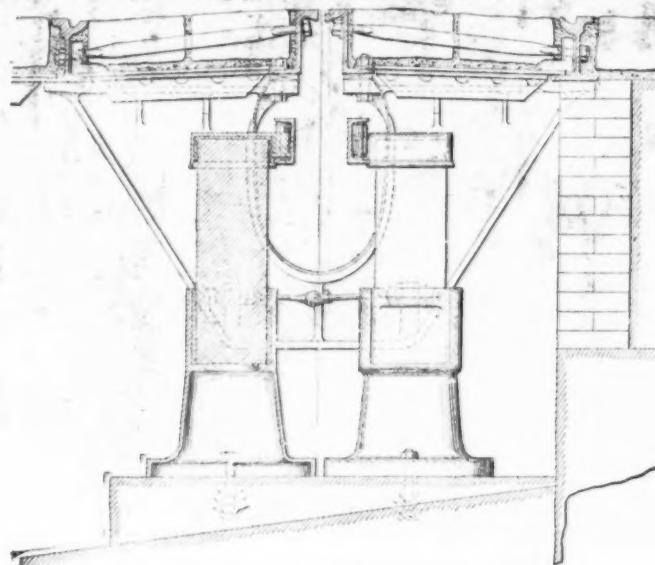


FIG. 2.—SECTION OF CONDUIT—PEDESTAL SUPPORT.

the centres, inspection and repair are rendered comparatively easy. The conductors are bonded to each other by stranded copper wire securely riveted into the web of the metal.

A modification of this system of suspension of the conductors is introduced for a length of about 100 yards of single track on 116th street, between Lenox and Seventh avenues. This is known as the pedestal method of support. At the manholes, instead of insulators suspended from the

width, that is, the entire distance of the two tracks. They are constructed of brick, with eight-inch walls that rest on concrete foundations. The floors are laid with six inches of concrete and are provided with drains for carrying off water. With this provision for drainage no trouble from water in the conduit will, it is believed, be experienced. The conduit was built along the grade of the street, but with sufficient pitch to permit any water flowing into the conduit to find its way into the manholes,



FIG. 3.—PLOW OR UNDERGROUND CONTACT.

on Lenox avenue was chosen as the scene of the experiment.

In formulating the project the Traction Company proceeded upon conservative lines and determined to reduce the consequences of failure to the minimum of damage which would inevitably arise from any stoppage in the service. The plan, therefore, contemplated the construction of the line as if for a cable road, in order that should the electrical system prove unsuccessful the electrical portion could be taken out and the cables and pulleys of a regular cable system introduced into the conduit without loss of time and at comparatively small expense. Upon this basis construction was commenced, and no pains

tapped into the conductor at the necessary points. This line will then be divided up into sections, and its general operation thereby greatly facilitated.

The construction of the underground contact system is simplicity itself. The plow suspended from the car truck passes through the slot in the centre of the track and presses against the flat surfaces of two iron conductors running the entire length of the conduit. These conductors are placed each three inches on each side away

ceiling of the conduit, the conductors are supported by a soapstone pillar. The channel-bar conductors in this case are five inches deep, and are set twelve inches below the slot. The soapstone pillars are provided with iron caps, furnished with brackets, to which the conductors are bolted, and continuous connection is secured by means of a bond of flat copper strips riveted to the webs. The soapstone blocks are set in iron bases erected in the manholes.

located every thirty feet, and from thence into the sewers.

The current does not return by means of the rails, as is usually the case with the overhead trolley. This is a distinct feature and advantage of the new system. Each conductor forms one side of the working circuit. The current is fed into the positive conductor and returns over the other or negative conductor. The current merely rises on one side of the plow, passes through the controllers into the motors, and after



FIG. 4.—THE CAR.

performing its duty, returns by the other side to the opposite or negative conductor.

The plough or traveling contact arrangement is also essentially novel. It consists

claim is made for the lightness of this pulley and its great clamping facilities. They are provided with interchangeable boxings, whereby a pulley may be made to fit any

Pan-American Barrow.

A substantial and cheap steel-tray barrow is shown in the accompanying illustration.

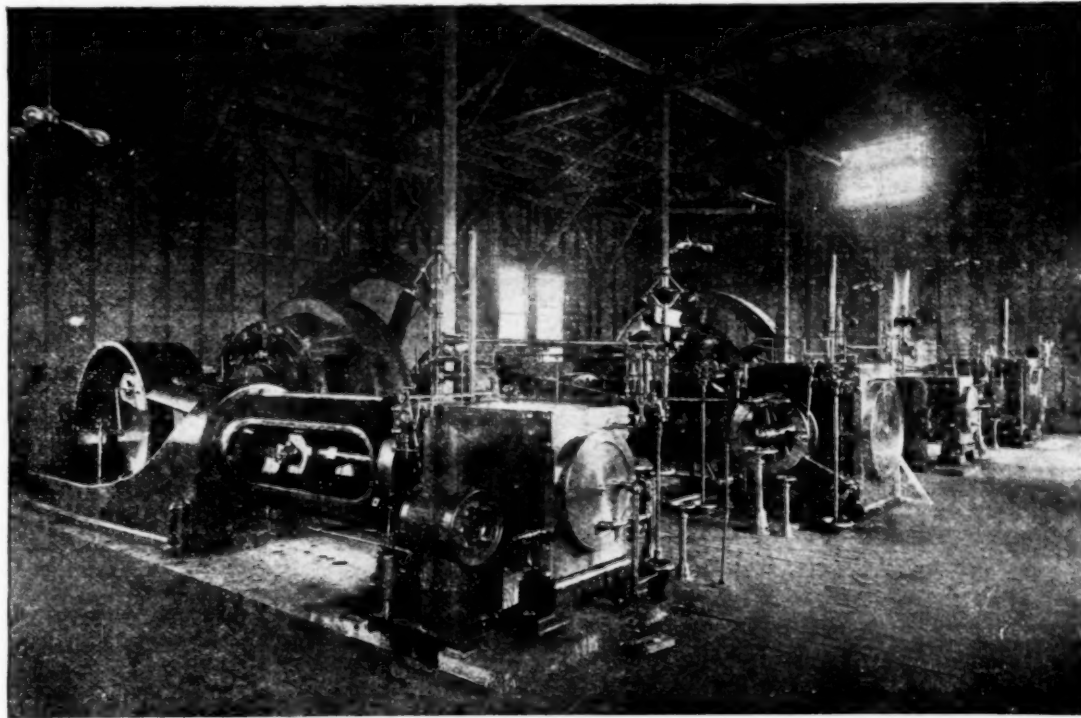


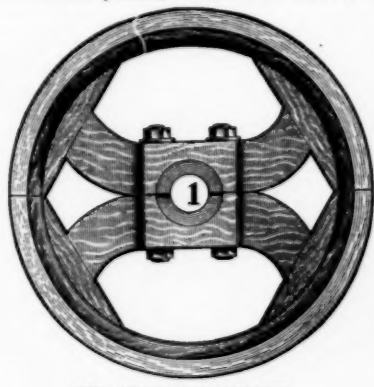
FIG. 5.—INTERIOR OF POWER-HOUSE.

of two pieces of iron, one on each side of the plough, supported on spring leaves, which causes them to press outwardly against the two conductors. The plough is suspended from a longitudinal bar bolted to cross-beams set upon the truck, and is constructed of two sheets of steel laid each one upon a plate of fibre. The two sheets of fibre are then brought together, enclosing strip-copper conductors connected at the top to the motor cables, and at the bottom riveted to two other pieces of sheet steel. These run on each side of the plough and serve as supports for the hinges, which carry the sliding contact pieces. A heavy sheet of fibre continues downward and serves to separate these contacts.

The motors employed are the standard General Electric 800 machines, controlled by "K" controllers. The cars which are to be used on the line were constructed by the John Stephenson Co., and are mounted on standard cable trucks constructed by the Peckham Motor Truck & Wheel Co.

The Kuhlmann Pulley.

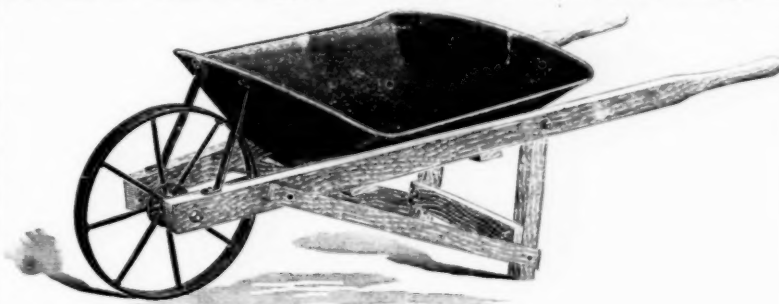
The growing employment of wood-split pulleys has made their qualities generally understood among power-users. Special designs of these pulleys will, however, always be of interest, and we illustrate the Kuhlmann patent, which has a number of



THE KUHLMANN PULLEY.

features. This pulley can be applied and fastened to a shaft in a few minutes by the most inexperienced person, and results will be satisfactory. They are made from first-class, thoroughly-seasoned, selected, dried and tempered lumber. Each segment is both nailed and glued, and put together by skilled workmen. A special

size shaft. The peculiar construction of the pulley secures for it a minimum resistance from the air, thus saving power. It is especially designed for the export trade and is called the "Pan-American." The tray is made of No. 15 best steel, pressed



THE PAN-AMERICAN BARROW.

has a malleable-iron fastening for the shaft, and can be conveniently put on or removed. The Suter-Linder Pulley Manufacturing Co., 16, 18 and 20 Fayette street, Indianapolis, Ind., manufacturer of these pulleys, is prepared to furnish estimates on any size up to twenty-five feet in diameter.

from a single sheet, without joint, seam or rivet, thus securing great strength. The flange of tray is turned over a five-sixteenths

tray is thirty-two inches; greatest width, thirty-three inches; depth at wheel end, eleven inches; depth at handle end, seven and a-half inches. The wheel has the spokes tightened from the centre, making it impossible, it is said, for the tires to come off or the spokes to be loosened. It revolves on a fixed shaft or axle bolt similar to a buggy wheel. The Kilbourne & Jacobs Manufacturing Co., of Columbus, Ohio, is the manufacturer.

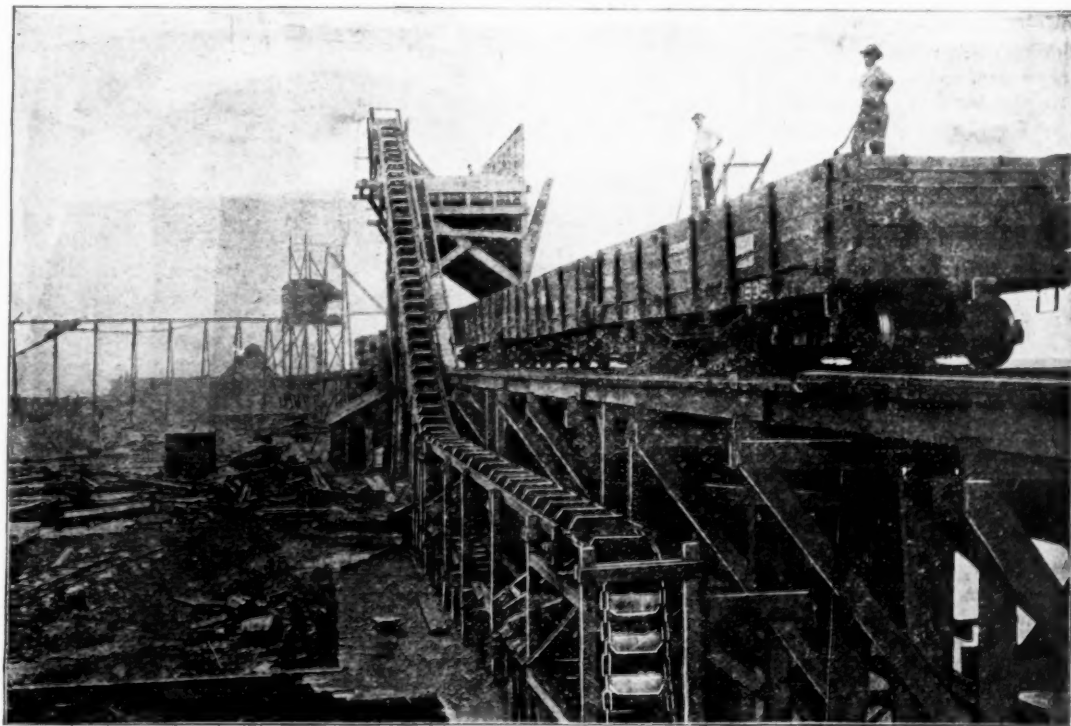
Jeffrey Conveying Machinery for Coaling Vessels.

The accompanying illustration represents a coal conveyor installed by the Jeffrey Manufacturing Co., of Columbus, Ohio, for the Mobile Coal Co., Mobile, Ala., on its wharf for the purpose of coaling steamers. It receives the coal from bottom dump cars on the trestle, conveying same to a height of about forty-five feet into a storage-pocket, from which it is delivered into vessels by means of chutes at a rate of about 250 tons per hour.

This conveyor is about 175 feet in length, is constructed of double steel chain of great strength and durability, to which iron scrapers are fastened by means of special swivel attachments. The coal is carried by the scrapers referred to through a steel trough, so constructed as to present a smooth and continuous surface, offering no impediment to the passage of the coal. The chain operates in iron guides, away from the material, supporting the scrapers clear of the trough bottom, thus greatly reducing the friction and wear, without being attended with unbearable screeching noise. The operation of this conveyor is considered perfect, carrying 120 tons run of mine coal continuously with it, it is stated, the least amount of breakage and minimum amount of power. All of the working parts are simple, strong and durable, and easy of access in case of repairs.

The conveyor is driven from the delivery end by an engine located on the ground, the connection (owing to the distance) being made by wire cable operating over rubber-lined sheaves.

In connection with this the Jeffery Company also furnish a car-puller, which is not shown in the illustration. This car-puller consists of a friction drum, driven by the same engine that operates the conveyor, by means of which the empty cars are



JEFFREY CONVEYING MACHINERY FOR COALING VESSELS.

facturing Co., 16, 18 and 20 Fayette street, Indianapolis, Ind., manufacturer of these pulleys, is prepared to furnish estimates on any size up to twenty-five feet in diameter.

steel rod which passes entirely around the tray, giving a smooth finish to the edge of the bowl, preventing breaking and securing a rigid tray. The greatest length of the

pulled away and the loaded cars brought into position for unloading.

The results obtained by the use of this machinery, it is claimed, could not be

accomplished near so rapidly and economically by any other known method. The saving in labor is large, to say nothing about the safe handling of the coal and the short time vessels are obliged to wait for their supply of fuel.

This installation of machinery is only a small part of the Jeffery Manufacturing Co.'s extensive business. This company equips coal mines complete with coal cutters and drills for mining the coal, electric locomotives for hauling it, elevator, conveyors and screens for preparing and loading it into cars ready for shipment. It also furnishes appliances for the mechanical handling of material in strawboard, pulp and paper mills, canning factories, saw and lumber mills, tanneries, smelting and refining works and numerous other industries.

New Springfield Shaper.

A view of the new 15 and 20-inch crank shapers made by the Springfield Machine Tool Co., of Springfield, Ohio, is shown herewith. In building this machine the manufacturer aimed to harmoniously group convenience, simplicity, strength and durability. The measure of success attained is evidenced by the high record of efficiency secured by this machine, as well as the satisfaction expressed by users. This shaper has many distinctive points that will appeal to the practical man.

The stroke can be changed and adjusted while running. Being operated by a crank motion, the stroke of these shapers is at all times positive, and they will, it is stated, invariably plane to a line, making it a particularly desirable tool for die-makers where accurate work is required. The vise is swiveled, and may be transferred from the top of the table to the side, adapting the machine to a larger range of work. Centres are furnished suitable for planing grooves in taps, reamers or any light cylindrical work.

With each machine is furnished an improved box table. Work can be bolted upon the top and both sides. Being made in this form it has, in addition to these advantages, a special degree of stiffness. It can also be utilized as a receptacle for tools, etc. The table may be removed and work bolted to the slotted apron to which box table is attached. This is desirable in planing the tops and sides of heavy pieces, such as legs of machines, etc. The machines are heavily geared, giving great power with high belt velocity. Gears are well proportioned, and are cut from the solid. All the bearings are accurately scraped to a fit; all studs and screws being made of steel.

Combination Foot Press.

The foot press illustrated herewith is intended for use in small shops where the amount of work, although limited, is too great to be economically done by hand. It is a recent production of the Ferracute Machine Co., Bridgeton, N. J., and is known by the name of press 245½. All kinds of work usually sold in a country shop can be made on it. The machine has an open front bed which allows 14x20-inch blanks to be cut and to drop through, and the flat bolster is furnished so that smaller dies can be used. For wiring or curling the edges of pans, etc., after they are put together, the "sunk bolster-plate" shown set in press is used. A sliding-plate is provided so that large deep work can be pulled forward and removed from the dies easily. This machine will wire or curl any work up to fourteen inches deep and fourteen inches in diameter. For smashing the side seams after the parts are hooked together the horn-bolster is used in connection with horn dies. This press has an adjustable fulcrum, and is equally well adapted for light or heavy work.

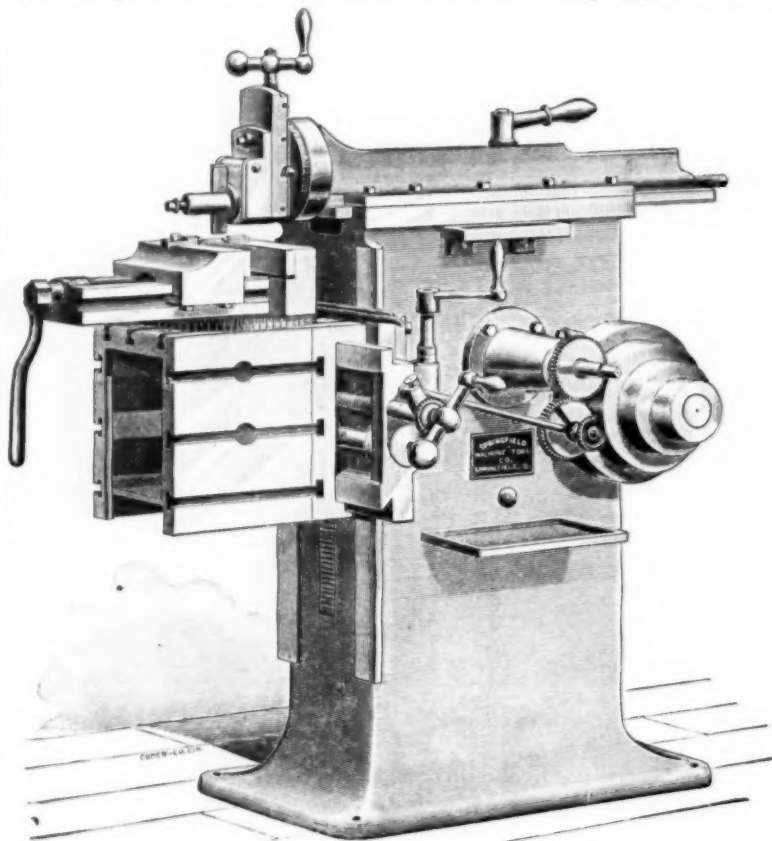
It is especially adapted for cutting, wir-

ing and seaming pieced tinware, etc., but can be used equally as well for such work as the cutting of heads and bodies of petroleum, varnish and meat cans, dust pans, stovepipe elbows, coal-hod bodies, powder kegs, lard pails and other sheet-metal

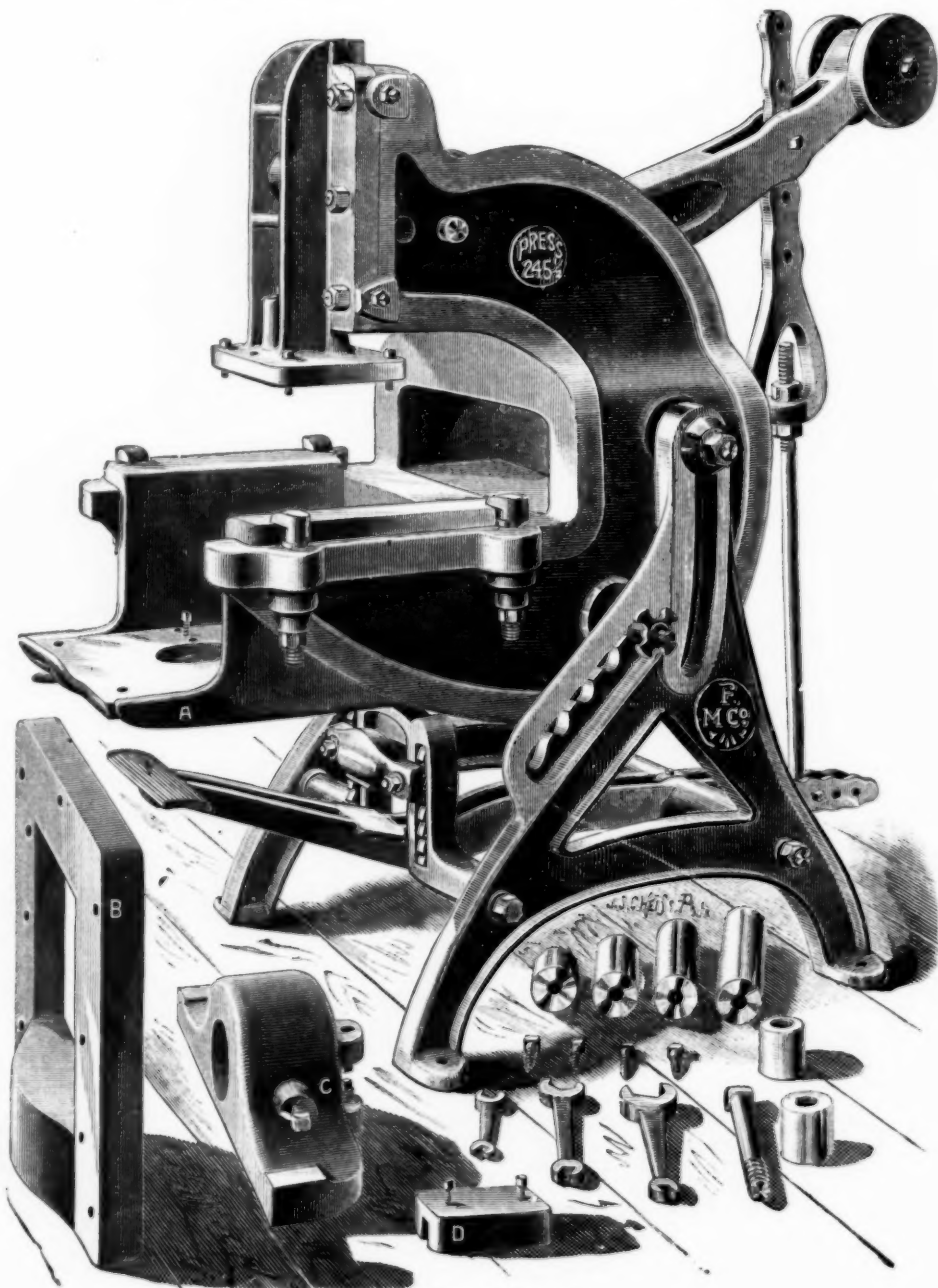
blanks not over fourteen by twenty inches. It can be adjusted to various angles, the guiding slots in the legs being of such a shape that the front of bed remains at same height whatever the amount of inclination. It has steel die-clamps, adjustable treadle-

stop and other improvements. The lever and treadle being balanced, the press works as easily as many smaller ones. Full sets of bushings, extensions, wrenches, etc., are furnished with each press, fitting the machine for work of a variety of sizes. The extreme height of press is five feet; distance back from centre of slide-bar, twelve inches; width between die-clamps, twenty-seven inches; height from bed up to bottom of slide-bar, including adjustment, forty-nine inches; maximum stroke of slide-bar, either one or two inches, depending on whether fulcrum pin is used in either forward or back hole. The total weight of press is about 2700 pounds.

A STORY of Mexico told in a delightful vein is compressed in a volume entitled "Mercedes." The author, Miss Sarah Hale, a missionary of the Southern Baptist Board at Guadalajara, Mexico, aims to correct statements regarding the social and religious conditions of the country which have from time to time appeared in the newspapers of the United States. Being on the ground and a close student, her observations are given with an authority that lends them additional value and heightens the highly interesting nature of the story. While a work of fiction, it is really a contribution to history, and the painstaking efforts of the writer to eliminate statements not susceptible of substantial proof gives the book a permanent character. It presents from a Baptist standpoint the influence of the prevailing religion on the minds of the people and their moral and social customs. The book is published by the Baptist Book Concern, of Louisville, Ky.



NEW SPRINGFIELD SHAPER.



COMBINATION FOOT PRESS.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

The Market for Cottonseed Products.

NEW YORK, August 6.

The week opened with prices well sustained, but toward the close a decline became evident. A disposition on the part of manufacturers in the early part of the week to withhold stocks at current quotations, with a view of obtaining still higher prices, retarded the volume of the week's business. Their action was based on the theory that the comparatively light holdings and generally improved aspect of the cotton-oil situation warranted higher values. At this writing sales of prime summer yellow are being effected on a 28 cent basis, and 27 to 27½ cents for good off-grade yellow. Owing to the stronger position of tallow, cotton oil received material consideration at the hands of the Western soap trade. Exports are, however, dull, foreign trade being for the time of a languishing character. With one or two important exceptions, the demand from Western packers has been slow. Butter oil is nominally quoted at 30 cents and white oil at 32 cents. A few small parcels of crude in barrels realized 24½ cents, with 25 cents being the asking price, and 24 cents for off grade barreled crude. Off-grade yellow shipments to England have been of a fair character, but reluctance to effect transactions unless at a concession from current prices is manifest—a condition which the manufacturers having consignments at this market are forced to recognize; hence the altered attitude of the latter in making the best of the situation by releasement of holdings at best available figures. There are, however, parcels of prime yellow held at 30 cents, notwithstanding the retrograde movement. The heaviest exports during the week to a single destination consisted of 40,000 gallons to Rotterdam, at which point prices are yet extraordinarily low. Accepting sales effected during the week as a criterion of the relative holdings of prime and off grade summer yellow, the preponderance of the latter is very evident—52,500 gallons prime at 28 to 29 cents and 117,250 gallons of the off quality at 27¼ to 28 cents. Compound-lard manufacture is of a decidedly slow character in Western as well as Eastern points, primarily owing to the buying interests for the time being centred in the pure product, the ample holdings of which at comparatively low prices exert a restricting influence on the development of trading in the former commodity. The Latin races of this hemisphere are at length awakening to the true character of cotton oil for edible and other purposes, as evidenced by the rapidly-increasing volume of exports to the various Central and South American ports. Current prices for the various grades are as follows: Crude, prime, in barrels, 25 cents; off-grade crude, 23 to 24 cents; yellow summer, prime, 28 to 29 cents; butter oil, 29 to 30 cents; yellow summer, off quality, 27 to 27½ cents; white oil, 31 to 32 cents, and soap stock, 1¼ to 1½ cents per pound. Crude at the mills is quoted at 19 to 20 cents.

Cake and Meal.—The outlook for a more uniform distribution for foreign and domestic consumption during the ensuing season than that which characterized the last is of a hopeful character. Prices are well sustained abroad. Shipments aggregating 1000 tons of cake and meal for Liverpool are reported. A noticeable feature in the character of the shipments referred to consists in four-fifths of the whole being in the pulverized form of meal. The feeding product disposed of in this manner precludes cause for complaint on the score of hardness and consequent indigestibility—a circumstance which should be sufficiently encouraging to the manufacturer to promote the transport-

ation of the material in this form preferably to that of cake. Receipts at this market for the week amount to 1500 bags meal, and 600 bags at Boston. Quotations are unchanged at all shipping points.

Cottonseed-Oil Notes.

DIRT was broken at Luling, Texas, on the 1st inst. for the erection of a 20-ton oil mill for the Luling Oil & Cotton Co. The mill will be first-class in all its appointments, and will be managed by Messrs. A. J. Conley & Son, of that city.

SECRETARY A. C. LANDRY, of the New Orleans Cotton Oil Exchange, has announced that from and after August 1 the price of cottonseed delivered in New Orleans from all points will be \$8 per ton net to the mills, no commissions of any kind to be added.

THE market in New Orleans for cottonseed and its products continues firm, with prices not materially changed. The New Orleans Cotton Oil Exchange has announced that the price of cottonseed delivered in that city after the 1st inst. will be \$8 per ton net to the mills, no commissions of any kind to be added. Receivers' prices for other products are as follows: Cottonseed meal jobbing at depot, \$17.25 to \$17.50 per short ton of 2000 pounds; for export per long ton of 2240 pounds f. o. b., \$18.75 to \$19 for current month; oilcake (for export), \$18.75 to \$19 per long ton f. o. b.; crude cottonseed-oil at wholesale or for shipment, strictly prime crude in barrels per gallon, 19 to 20 cents; loose per gallon, 17½ to 18 cents; refined cottonseed-oil, prime in barrels per gallon, at wholesale or for shipment, 24 to 25 cents; cottonseed hulls delivered per 100 pounds, according to location of mill, 20 to 25 cents; foots, 1 to 1½ cents; linters—A, 3 to 3½ cents; B, 2¼ to 2½ cents; C, 2 to 2½ cents, according to style and staple.

Wants Water-Power.

THE MANUFACTURERS' RECORD is in receipt of a letter from a New England manufacturing company in which it is said:

"We are looking for a good water-power of from 2000 to 4000 horse-power for the location of a new plant. We have to have good shipping facilities, as our freights will be from fifty to 100 tons per week of manufactured products, and of raw material nearly as much. We prefer to be near the coast, as we could ship the greater part of our products to New York, Philadelphia and Boston markets, and our raw material would also come from points by water."

N. S. ACKERLY, of Long Island, N. Y., has purchased about 400 acres of land in Southern Maryland near Leonardtown. He intends cultivating oysters on an extensive scale in the waters adjoining the property.

MR. C. H. BETTS, local manager of the Johnson Line of steamers at Port Royal, S. C., reports the sailing of the steamship Louisiana for Liverpool from that port on the 4th inst. Her cargo consisted of 3300 tons of phosphate rock and other merchandise. She left drawing twenty-five feet.

THE following vessels cleared from Charleston, S. C., last week with phosphate rock for Baltimore: Schooners Grace Andrews, 750 tons; Rillie S. Derby, 616 tons, and Mary Lee Patten, 800 tons. The total shipments from Charleston from September 1, 1894, to August 2, inclusive, were as follows: Coastwise, 93,203 tons of crude rock, and foreign, 3490 tons; total 96,693 tons. For the corresponding period in 1893-94 the coastwise shipments of crude rock were 110,419 tons, and 14,517 tons of foreign; total 124,936 tons.

PHOSPHATES.

Phosphate Markets.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, August 8.

During the past week there has been a moderate business in the phosphate trade, but the market is generally quiet, with no material change to note. There are very few local manufacturers in the market at present, and the bulk of transactions have been with out-of-town buyers. From the mining sections of South Carolina there is a fair movement, and the work of development in both land and river mines is being prosecuted vigorously. Prices at Charleston are unchanged at \$3 for crude, \$3.50 for hot-air-dried and \$6.50 for ground rock, all f. o. b. In Florida the situation is unchanged, and holders show no disposition to sell at present prices. Land rock is still reported at about 7d. abroad, and pebble is quoted at 9 cents a unit f. o. b. at Baltimore and other Eastern markets. The receipts of phosphate during the week were as follows: Schooners Rillie S. Derby, 550 tons; Maggie Lawrence, 800 tons, and Grace Andrews, 900 tons, all from Ashley river, S. C. The steamship Laureta arrived from Charleston with 1250 tons of acid phosphate, and Rebecca Moulton from Tampa with 950 tons of land pebble. The only charter reported was the schooner Mary Curtis, Ashley river, S. C., to Richmond, Va. In New York the following phosphate charters were reported: A British steamer, 1363 tons, Charlotte Harbor to Hamburg at 16/; a schooner, 686 tons, Charleston, S. C., to Boothbay at \$2 15; a schooner, 81 tons, Cartaret, N. J., to Richmond with fertilizer at 90 cents; a British steamer, 876 tons, Tampa to Hamburg at 18/, and a schooner, Fernandina to Baltimore at \$2.10.

FERTILIZER INGREDIENTS.

The market has ruled quiet during the week, with no special feature of interest. The Western market is fairly active, with stocks generally light. Blood is quoted \$1.50, tankage \$1.40 and hoof meal \$1.50 to \$1.55, all f. o. b. Chicago. There is a better inquiry from the Southern market for prompt delivery. Sulphate of ammonia rules quiet at about former figures. Nitrate of soda is quiet and steady.

The following table represents the prices current at this date:

Sulphate of ammonia, gas.....	\$2 75@	—
Sulphate of ammonia, bone.....	2 65@	—
Nitrate of soda.....	1 75@	—
Hoof meal.....	1 80@	—
Blood.....	1 85@	1 90
Azotine (beef).....	1 75@	1 80
Azotine (pork).....	1 80@	—
Tankage (concentrated).....	1 60@	—
Tankage (9 and 20).....	1 65	and 10
Tankage (7 and 30).....	15 50@	16 00
Fish (dry).....	21 00@	—
Fish (acid).....	15 00@	—

CHARLESTON, S. C., August 5.

The week has developed some little improvement in the phosphate market. While prices are low, with no immediate tendency upwards, the market is stiff and steady at currently-quoted figures, and miners are in good condition and hopeful of a decided rise in price with the return of prosperity to the fertilizer trade. The shipments coastwise are good, and European inquiries and sales are keeping the river miners working full force. The fertilizer trade is at a standstill just now, little being done in the purchase of ammoniates or the manufacturing of stock. Prices are \$3 crude, \$3.50 hot-air-dried and \$6.50 ground rock, all f. o. b. Charleston. The coastwise shipments were: Grace Andrews, 750 tons rock for Baltimore; R. S. Derby, 616 tons rock for Baltimore; M. L. Patten, 800 tons rock for Baltimore; while in port and loading are Mary Curtis, I. T. Cambell, City of Philadelphia, A. L. Mulford, Douglas Gregory, A. C. Grace, C. L. Godfrey. The coastwise shipments since September 1 were 96,693 tons crude and 1405 tons ground rock, against 124,936 tons crude and 4837 tons ground rock for same date last year.

Phosphate and Fertilizer Notes.

THE South Carolina agricultural experiment station has issued its bulletin, giving the analysis of commercial fertilizers for the season of 1894-95. It contains tables showing the calculated commercial values and the manufacturers' guarantees of the official samples of fertilizers collected this season. Two hundred and six brands of goods have been sampled and analyzed. Of these eighty-seven are ammoniated fertilizers, sixty-one are acid phosphates, thirty-three are cottonseed meals, nineteen are kainits and six are miscellaneous samples.

MR. K. B. HARVEY, deputy collector of the sub-port of Punta Gorda, reports the shipments of phosphate for the month of July as follows: 1st, steamship Coralina for King's Lynn, England, with 2225 tons; 3d, steamship Serra for London with 2895 tons; 5th, steamship Rosshire for Glasgow with 2512 tons; 10th, steamship Miria for Bristol with 2724 tons; 15th, steamship Alicia for Plymouth with 3036 tons; 21st, bark Earl of Devon for Exmouth, England, with 710 tons; 31st, steamship Rita for Avonmouth with 2574 tons—all shipped by the Peace River Phosphate Co.; total shipments for the month 16,676 tons.

A MEETING of the Southern Fertilizer Manufacturers' Association was held in Atlanta on the 1st inst. The meeting was called for the purpose of discussing a plan to reduce the production of the various companies embraced in the association. The business of the meeting was mainly devoted to an effort to divide the decrease among the manufacturers on the coast and those in the interior. This is the third meeting that the fertilizer manufacturers have had, and they adjourned without coming to any definite understanding as to the agreement proposed. It is stated that another meeting will probably be held before the 1st of September, when the special committee on agreement will make a report.

MESSRS. J. M. LANG & Co. report the shipments of phosphate rock through the port of Savannah, Ga., for the month of July as follows: 1st, steamship Laleham for Hamburg with 458 tons by the Anglo-Continental Guano Co.; 3d, steamship Manitou for Genoa with 1665 tons by H. F. Dutton & Co.; 6th, steamship Viola for Rotterdam with 1101 tons by B. Arentz & Co.; 10th, steamship Sutherland for Rotterdam with 3000 tons by J. M. Lang & Co.; 19th, steamship Nyassa for Hamburg with 2345 tons by A. Newman; total 8500 tons. The British steamship Cydonia was cleared on the 3d inst. by Strachan & Co. for Gothenburg and Stettin. She took out 1502 tons of phosphate rock with other merchandise.

THE phosphate shipments from Port Tampa, Fla., for the month of July are reported as follows: 2d, steamship Feradene, 3304 tons of pebble for Helsingborg by the Land Pebble Phosphate Co.; 6th, schooner Edna M. Champion, 1402 tons of pebble for Philadelphia by the Bone Valley Phosphate Co.; 12th, steamship Hindustan, 258 tons of pebble by the Land Pebble Phosphate Co., and 2938 tons of rock by the Florida Phosphate Co. for Certe, France; steamship Tuscan Prince, 1005 tons of pebble for Genoa by the Land Pebble Phosphate Co.; 17th, steamship Raisby, 2949 tons of pebble for Rotterdam by the Land Pebble Phosphate Co.; schooner R. J. Moulton, 825 tons of pebble for Baltimore by the Bone Valley Phosphate Co.; 23d, steamship Ingram, 1986 tons of rock for Rotterdam by the Bradley Phosphate Co.; steamship City of Belfast, 2870 tons of rock for Flume by Louis McLain; 26th, steamship Para, 2156 tons of pebble for Ipswich by Florida Phosphate Co.; schooner Robert J. Dunn, 918 tons of pebble for Cartaret, N. J., by the Terra Ceia Phosphate Co.; total for the month 20,611 tons.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under the head of "Machinery Wanted."

✂ In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ALABAMA.

Cedar Bluff—Timber, etc.—R. T. Dorsey, of Atlanta, Ga., has purchased for \$6850 the iron ore and timber lands of the Cedar Bluff Land, Mining & Manufacturing Co.

Cleburne County—Gold Mines.—C. E. James, J. B. Ragon, T. M. McConnell, of Chattanooga, Tenn., and others will organize a company to develop gold mines in Cleburne county.

Ensley—Furnaces.—The Tennessee Coal, Iron & Railway Co. is putting a new bell in No. 1 furnace and will thoroughly overhaul No. 2 furnace; work to commence at once. The latter work will take two months' time.

Florence—Pump Works.—The Florence Pump & Lumber Co. will make extensive repairs and additions to its plant.

Florence—Woodworking Plant.—Sherman P. Winch, of Warren, Ind., contemplates building a woodworking plant.

Gadsden—Pipe Works.—The Gadsden Pipe Works, idle for nearly two years, will be put in operation by W. H. Weller, of St. Louis, Mo., who has purchased.

Heflin—Gold Mines.—The Anniston Gold Mining Co. has been organized with William Noble as president, and E. E. G. Roberts, secretary and treasurer, both of Anniston. This company has purchased property near Heflin, Ala., which promises a very large yield of gold.

Jasper—Lumber Plant.—The Jasper Brick & Lumber Co., already noted, has taken into the firm D. K. Cartter and J. B. Shields. The company will put in a set of sash, door and blind machinery, and the plant will be otherwise enlarged. A large building is being erected at the mill and other improvements are being made.

Mobile—Docks, Elevators, etc.—It is reported that the Mobile, Jackson & Kansas City Railroad Co. is about to build 2000 feet of wharf front, a grain elevator of 250,000 bushels capacity, a coal dock of 10,000 tons capacity and a lumber boom to contain an area of ten acres near Mobile.

Mobile—Ice Plant.—The Stonewall Ice Co. will put in a 20 ton machine.

Montgomery—Abattoir.—Aldermen Fleming, Campbell and Isaacs contemplate building an abattoir.

Montgomery—Electric-light Plant, etc.—The Montgomery Cotton Mills will put in an electric light plant, boiler and engine, etc.*

Pruitt—Flour Mill.—Thos. D. Pruitt is enlarging his flour mill.

Troy—Water Works.—Contract awarded to Howard Neely, of Chattanooga, for the water-works system.

Tuscumbia—Hoop Factory.—It is reported that an Illinois firm will locate a hoop factory at Tuscumbia.

Wyeth City—Cotton Mill.—John A. Wyeth, 27 East 58th street, New York, is negotiating for the erection of a cotton mill.

ARKANSAS.

Hot Springs—Medicine Factory.—The Hot Springs Medical Co., capital stock \$500,000, is erecting a

laboratory for bottling the hot waters of the springs, etc. Murray Keller is heading the enterprise; office in the Havemeyer Building, New York city.

Hot Springs—Water-power, etc.—A company has been formed to develop the water-power project already noted. It is proposed to construct a dam to develop power from the Ouachita river and supply same to manufacturing plants, etc. H. C. Davis is president; J. J. Walker, secretary, and Robert Murray, treasurer.

Jonesboro—Water Works.—The Jonesboro Water Works Co. has been incorporated with a capital stock of \$20,000 by Jesse W. Starr, of St. Louis, and J. L. Pace and E. L. Westbrook, of Jonesboro.

Little Rock—Soap Factory.—W. T. & R. J. Wilson have established a soap factory.

Little Rock—Oil Company.—The Standard Cottonseed Co., already noted as organized, has filed articles of incorporation, placing capital stock at \$1,000,000. J. E. England is president; S. S. Wassell, secretary, and Herbert Wassell, treasurer.

Little Rock—Elevator.—An Illinois firm has written J. A. Woodson relative to erecting a grain elevator.

Prairie Grove—Brick and Tile Works.—Frank A. Terpenning is rebuilding his brick and tile works.*

Springdale.—Chartered: The Springdale College Co. with \$25,000 capital; M. Berry, president.

Texarkana—Gas Plant.—A gas plant for supplying railroad cars will be established. Address Peter Bauer.

FLORIDA.

Anthony—Pottery.—H. B. Greco & Son, of Wheeling, W. Va., will, as reported last week, establish pottery and decorating plant at Anthony.

Daytona—Brick Works.—A company has been organized to operate brick works; capital stock \$50,000.

Forsyth—Cannery.—According to a report Northern parties contemplate erecting a \$100,000 cannery.

Gainesville—Woodenware Factory.—The new Gainesville Woodenware Manufacturing Co. has received a carload of machinery for its factory, and a building is being erected for same.

High Springs—Furniture Factory.—Vincent, Futch & Co., already noted, will erect a furniture factory.*

Jacksonville—Ice Plant.—A report says that Miller & Robertson will erect an ice plant.

Jacksonville—Telephone System.—The Jacksonville Telephone Co., lately noted, has organized with a capital stock of \$30,000. W. N. Shine and M. B. Rice, of Tallahassee, and A. H. King are interested.

Jasper—Saw Mill.—William T. Spencer will build a saw mill.*

Ocala—Ice Plant.—Carmichael & Son, of Ocala, and the Acme Brewing Co., of Macon, Ga., will erect an ice plant of twenty tons daily capacity.

Orlando—Cotton Mill.—It is proposed to organize a company to erect mill. C. J. Allred is interested.

Orlando—Rice Mill.—Geo. E. Macy will erect a rice mill.

Palatka—Cigar and Box Factory.—The American Cigar & Tobacco Co. will erect a cigar factory to employ 1100 hands and produce 200,000 cigars daily; also an immense cigar-box factory site has been secured and the plant will be in full operation by November 1. Palatka citizens have subscribed \$30,000 of the capital stock. Martin Griffin, Sr., of Palatka, and Robert H. Partridge, of Ocala, are among the directors.

Pensacola—Docks, etc.—The Louisville & Nashville Railroad Co. (office Louisville) contemplates \$200,000 worth of dock improvements at Pensacola.

Sanford—Meal Mill.—Calhoun & Braswell have built a cornmeal, grits and feed mill.

Tampa—Brick Works.—The Syd B. Sturdevant Co. has commenced the manufacture of brick by a new process.

Tampa—Elevator.—Work has been commenced on the electric elevator at Port Tampa for the Plant system. The capacity of this elevator will be 240 tons or twelve cars per hour. It will require 100 horse-power to operate it, which will be supplied by a system with an alternating current from the electric-light station at Port Tampa City, 10,000 feet away. The erection of the machinery will be begun in a week or ten days, and the elevator will be ready October 1. The old steam elevator will also be run by electricity.

Tampa—Cigar Factory.—E. F. Averill's cracker factory noted last week has been contracted for and is now building.*

Whitfield—Lumber Plant.—The H. L. Berry Co. has been incorporated to operate a steam saw mill, manufacture, buy and sell lumber and products of wood, by H. L. Berry, John M. Garrett, Calvin Johnson, Whitfield; H. Baars, Pensacola; capital stock \$126,000.

GEORGIA.

Atlanta—Faucet Works.—The Lester Automatic Faucet Co. has been chartered for manufacturing faucets with a capital stock of \$50,000; A. G. Rhodes, president; J. S. Lester, vice-president and manager, and J. K. Polk, secretary.

Atlanta—Fertilizer Works.—Under the title of the Southern Fertilizer Co., with headquarters at Atlanta, the Southern Fertilizer Co., the George W. Scott Manufacturing Co., of Atlanta; the Georgia Fertilizer Co., of Rome, and the Comer Hull Co., of Savannah, have combined, with capital stock represented as being nearly \$1,000,000. The paid-up capital is \$850,000, and an application for charter has been made.

Atlanta—Telegraph, etc.—D. M. Dunn, F. J. Hoyle and S. H. Howell have incorporated the American Telegraph Supply Co. to manufacture and deal in telegraph supplies; capital stock \$250,000.

Canton—Gold Mines.—J. C. Wall and associates have organized a company, purchased and will develop 1600 acres of land containing gold deposits.

Columbus—Cotton Mill.—The Swift Manufacturing Co. has let contract for improvements to its mill previously reported as to be made. About \$35,000 will be expended.

Dahlonega—Construction Company.—The Dahlonega Construction Co. has been granted a charter. The incorporators are George J. Baldwin, A. W. Bacot and George Freeman, and their charter gives permission to build and construct tramways, roads, railroads, etc. The company will organize with a paid in capital stock of \$10,000, and will have the privilege of increasing to \$50,000.

Heardmont—Cotton Mill.—Thos. M. Swift, of Elberton, has purchased site near Heardmont, and will erect a large plant for manufacturing cotton goods; water-power will be used.

Jonesboro—Hosiery Mill.—The erection of a hosiery mill is talked of.

Rome—Cotton Mill.—It is reported that a Maine cotton manufacturer contemplates locating a mill.

Savannah—Drugs.—Chartered: The Huff Pharmacal Co., by Sidney W. and E. B. Huff. The capital is to be \$20,000.

KENTUCKY.

Berea—Telephone Line.—Rawlings and Fish have formed the Berea, Kingston & Richmond Telephone Co. to construct telephone line.*

Carrollton—Coal Company.—The Kentucky River Coal Co. has been incorporated with a capital stock of \$500; W. F. Lawler, president, and Mrs. Mary C. Todd, secretary treasurer.

Elizabethtown—Water Works.—The city will expend \$18,000 to build the proposed water works. S. K. Felton, of Cuthbert, Ga., will prepare plans, etc.; R. L. Wintersmith, mayor.*

Frankfort—Cotton Mill.—The Kentucky River Mills has ordered a 300 horse-power turbine wheel.

Halsey—Coal Mines.—The Kentucky Birdseye Coal Co. has reopened its mines.

Louisia—Oil Wells.—J. P. Shiffer, of Beaver, Pa., has leased lands near Louisia and will drill for oil.

Louisville—Bagging Factory.—The Tapp Bagging Co. will be reorganized and resume manufacturing. Machinery will be overhauled and 300 hands employed. Will add shoes and burlaps to its product soon.

Louisville—Trunk Factory.—The Chilton-Guthrie Trunk Co. will erect a new \$10,000 factory building on a new site.

Maysville—Pulley Works.—The Sprinkle Pulley Co., of Pennsboro, W. Va., will remove its works to Maysville, as recently noted. Contracts have been let to Lane & Worick for main building two stories high, 55x126 feet, of frame, with metal roof; engine and boiler room, of brick, 34x36 feet. C. C. Hopper is general manager.

Parkersburg—Oil Wells.—The Corning Oil Co., Mr. Purdey, manager, will drill for oil.

LOUISIANA.

Abbeville—Bridge.—Plans are being prepared for a steel swing bridge, with draw span 170 feet in length. Address W. W. Edwards, chairman of committee.

Benton—Lumber Plant.—The Lone Star Lumber Co., recently noted as incorporated at Texarkana, Texas, has been organized with J. M. McGill, president; E. L. McGill, general manager; John S. Burgess, secretary and treasurer. They are erecting a new modern mill at Benton, and have contracted for an Andrews dry-kiln and will put in all modern improvements for manufacturing lumber.

Carmel.—The Carmelite Educational Society of Louisiana and Texas, of Carmel, La., and Stanton, Texas, assets \$30,000, has been incorporated by Albert Wagner and others.

Haasville—Stave Plant.—The Lone Pine Lumber Co. is building a plant for manufacturing heading and staves for 1000 barrels daily.

Iberville—Sugar house.—V. & J. A. Berthelot are increasing their evaporating capacity.

Lafayette—Sugar Plant.—The Lafayette Sugar Manufacturing Co., lately noted as to erect plant, has applied for a charter with capital stock at \$100,000. The board of directors are G. A. Beaux (president), of New Orleans, Wm. R. Taylor, R. J. Sobrai, John H. Murphy and P. J. McMahon.

Lafourche Crossing—Sugar Plant.—The Lafourche Refinery Co. has contracted for fourteen masse cuite tanks, with a system of troughs, pumps and valves to make delivery to the mixers. There are thirty five other tanks in the refinery which are to be supplied with the necessary valves to fit them for masse cuite third sugars. The refinery is about to close a contract for two 150 horse power boilers in order to increase the steam capacity.

New Iberia—Sugar Refinery.—Marx Levy's 400-ton central refinery is nearing completion.

New Orleans—Elevator, Warehouse, etc.—The Delta Construction Co. has let contract for its terminal improvements recently noted; contract is for 75,000-bushel elevator, cotton warehouse, sorting-yard, etc.

Provençal—Planing Mill.—M. W. Carroll, of Dallas, Texas, will erect a new planing mill.*

Shreveport—Ginhouse.—S. J. Zeigler will erect a ginhouse.

Shreveport—Mercantile.—Incorporated: The W. A. Pleasants Hardware Co., with capital stock of \$50,000; W. A. Pleasants, president and manager; Leon M. Carter, secretary.

Shreveport—Machine Shops, etc.—The Kansas City, Watkins & Gulf Railroad proposes erecting repair shops and round house to cost \$20,500, depot to cost \$1500, etc.

Slidell—Brick Works, etc.—E. G. Schlieder, of New Orleans, has purchased, as reported, the Salmen Manufacturing Co.'s brick plant, cypress lands, etc., and a company will be organized to develop the property; price paid for property \$45,000.

MARYLAND.

Baltimore—Iron Works.—The Baltimore Iron & Steel Casting Co. will double the capacity of its plant, as reported last week.

Baltimore—Hat Factory.—The B. H. Bittle Hat Manufacturing Co. has been incorporated by Bonio H. Bittle, Isaac L. Newman, John H. Gildea, Jr., William B. Oram and Robert H. Perry, Jr., with a capital stock of \$10,000.

Baltimore—Telephone Company.—The Standard Telephone Co. of Washington and Baltimore City, recently noted as to be organized, has been incorporated with a specified capital stock of \$140,000 by John W. Woodland, Bruce B. Gootee, Gen. Felix Agnus, Wm. S. Thomas and Robert M. Galt, all of Baltimore; office in Equitable Building.

Cumberland—Hosiery Mill.—Harry Thompson, of Williamsport, is reported as to erect a hosiery mill.

Cumberland—Publishing.—The Hour Book Publishing Co. has been incorporated with Chas. T. Lowndes, president, and H. K. Duke, secretary-treasurer.

Cumberland—Rolling Mill.—A rumor says that Lynn & Loughton, of Pittsburgh, have leased the Baltimore & Ohio rolling mill.

Frostburg—Coal Mines.—Black, Sheridan & Wilson, of Baltimore, have purchased the Frostburg Mining Co.'s property of 160 acres of big vein coal and will develop same.

Frostburg—Coal Mines.—The New York Mining Co., Jno. Sheridan, president, has, as reported, already resumed operations at its mines. Its lands include 1200 acres, said to be underlaid with 700 acres of big vein coal.

Hood's Mills.—Sand Mill.—Bennett Bros., of Baltimore, will erect mill for grinding sand.

Laurel—Elevator.—A grain elevator is being built for Schooley & Tighe by George A. Adelsperger. The elevator will store 2500 to 3000 bushels of grain.

MISSISSIPPI.

Canton—Electric-light and Water Works.—The city will build and electric-light plant and construct water works; H. W. Latimer, city clerk.*

Grenada—Telephones.—B. L. Roberts, Emile Levy and H. W. Latimer have incorporated the Grenada Telephone & Telegraph Co. to construct lines. The capital stock is \$250,000.

Hartman—Lumber Plant.—The Hartman Lumber Co. will put in additional machinery.

Meridian—Cotton Mill.—J. T. Chalk, Edwin McMorris, E. T. George and others will incorporate the Co-Operative Cotton Mills Co. with a capital stock of \$500,000.

MISSOURI.

Albany—Water Works.—The construction of water works is talked of. W. M. Millen can be addressed.

Caruthersville—Lumber Plant.—The Phleger Lumber Co. has been chartered to manufacture house-building materials, handles, heading, etc., by T. L. Taylor, F. W. Phleger and Canninghane Bros.; capital stock \$6000.

Independence—Sewers.—An estimate is being made of probable cost of sewerage. If a practical system can be had at a reasonable cost the municipal authorities may submit the question to a vote of the people. Address the mayor.

Joplin—Foundry, etc.—Fred Hamm is reported as to build foundry and machine shop.

Kansas City—Viaduct.—The Kansas City Elevated Railway Co. proposes to build an elevated viaduct 644 feet long for an electric and cable road at an estimated cost of \$40,000; general manager, Robert Gillham.

Kansas City—Gas-house.—The Missouri Gas Co. has permit to build a brick generating house to cost \$10,000. The house will be 100 feet front by 100 deep and two stories high.

Kansas City.—Chartered: The Radford Eczena Co., capital stock \$10,000, by A. A. Kerr, F. A. Kiser and L. B. Keebaugh.

Lee's Summit—Cold-storage Plant.—W. S. Davidson will erect a cold-storage plant.

Ozark—Lead and Zinc Mining.—Connet & Berry, of Aurora, will develop newly-leased mineral land.

Richmond—Saw Mill.—J. L. Farris, Jr., will erect a saw mill.

Springfield—Manufacturing.—The Springfield Manufacturing Co., already noted as incorporated, will develop placer deposits and will use hydraulic system; may use suction pumps later on.

St. Louis.—Incorporated: The St. Louis Curled Hair Co., with a half-paid capital of \$25,000, by James A. Reardon, L. C. Nelson and Jesse T. Baker.

St. Louis—Lumber Mill.—The H. C. McDaniel Lumber Co., to cut and deal in lumber, has been incorporated by John J. Ganahl, L. C. Ganahl, L. J. Ganahl, John A. Reheis, John Joseph, St. Louis; Henry E. McDaniel, El Dorado, Ark.; capital stock \$30,000.

St. Louis—Manufacturing.—It is proposed to erect a building to be used by small manufacturers. Henry J. Cobb, of Chicago, will probably prepare plans.

St. Louis—Refrigerating Plant.—J. C. Darst proposes the erection of a seven-story cold storage and refrigerating building to cost about \$400,000.

St. Louis—Cracker Factory.—J. L. Wees has prepared plans for a cracker factory for L. D. Dozier to have electric-lighting, steam freight elevator, boiler; cost \$16,000.

St. Louis—Tobacco Factories.—I. S. Taylor has prepared plans for a number of tobacco factories for the Liggett & Meyer Tobacco Co. to have fire escapes, architectural iron work, safes and vaults, electric-lighting, belting, tobacco and licorice machinery, asbestos, steam pipe covering, engines, boilers, steam-heating; cost \$1,200,000. The above will comprise fourteen buildings, ranging from 150 to 200 feet in length and from 50 to 100 feet in width. The contract for excavation and stone foundations has been let to Samuel Hoffman for \$240,000. This job has been sublet and work commenced. Other contracts will be let during the next sixty days.

Warsaw—Bridge.—D. M. Eddy, of Stockton, Mo., has submitted a proposition to the citizens to construct a suspension bridge 370 feet in length over the Osage river at an estimated cost of \$8000 if \$1000 bonus is raised.

NORTH CAROLINA.

Burlington—Cotton Mill.—W. L. & E. C. Holt will erect a new mill 100x152 feet in size.

Charlotte—Gold Mines.—Northern parties have, as lately reported, purchased and will develop the Frazier gold mine. Edw. McDowell will be manager.

Forest City—Cotton Mill.—The Forest City Mill will put in eighteen cards, 3000 spindles and looms to match.

Goldsboro—Lumber Plant.—The Southern Lumber Syndicate may establish a large plant in Goldsboro. Address care of Jno. H. Hill, mayor.

Greensboro—Factory.—J. H. White & Co. have commenced the erection of a five-story factory building.

Haw River—Cotton Mill.—The Cora Manufacturing Co. will erect a cotton mill.

Henderson—Manufacturing.—Jno. B. Keech, of Tarboro, may locate a factory.

Hot Springs—Barytes Mill.—The Hot Springs Barytes Co. will probably increase the capacity of its mill.

Lowell—Cotton Mill.—J. C. Rankin, of Mt. Holly, has purchased interest in the Spencer Mountain Mill, changed name to the Star Cotton Mill, and will put in \$21,000 worth of new spindles.

Lumberton—Cotton Mill.—The new mill lately noted will contain 2500 spindles in a building 300x50 feet; J. A. McAllister, secretary.*

Manteo—Ice Plant.—F. P. Gates will put in a 12-ton ice plant.*

Monroe—Cannery.—W. M. Butt will put in a cannery.*

Monroe—Cotton Mill.—Heath Bros. have bought for \$62,000 and will operate the Monroe Cotton Mills, having incorporated the Monroe Cotton Mills with a capital of \$75,000.

Pine Bluff—Cotton Mill.—F. M. Sniff will erect a 3000 spindle mill for manufacturing cordage and ball thread at Henry Shoals. Address care of J. W. Carr.

Monroe—Water Supply.—Contractor Knox has made a proposition for sinking wells for water supply.

Mountain Island—Cotton Mills.—A factory is being built for manufacturing seines, nets and kindred goods; W. T. Jordan, manager. The mill is being removed from Baltimore, Md., where the owner, Wm. J. Hooper, has been operating it.

Newton—Cotton Mill.—S. M. Finger, J. C. Whitesides and others are organizing a cotton-mill company. It is said that \$50,000 has been subscribed.

North Wilkesboro—Coppersmithy.—N. C. Shepherd & Co. have established a coppersmithy.

Raleigh—Bridge.—The city will probably arrange with the Seaboard Air Line, through John H. Winder, general manager, for the construction of a street-crossing bridge, to be of iron and steel, probably a suspension bridge. Address the mayor.

Richmond County—Cotton Mill.—Gaston Baldwin, Rufus Bennett and James Ingram (who is president), all of Malee, N. C., have organized a company to erect a cotton mill.

Stanley Creek—Cotton Mill.—The Stanley Creek Cotton Mill Co. will increase its capital stock from \$20,000 to \$34,000.

Statesville—Cotton Mill, etc.—Geo. H. Brown, who lately purchased the Buffalo Shoals, is organizing a \$100,000 company to erect a mill at the shoals. A flour mill is also contemplated. N. B. Mills and others are interested.

Union County—Gold Mines.—The Triple Lead Gold Mining Co. will be organized to develop gold mines, and Chas. Hall Davis, of Petersburg, Va., is attorney for the interested parties.*

Statesville—Flour Mill.—W. L. Cutting will build a roller flour mill.*

Wadesboro—Cotton Mill.—The Wadesboro Cotton Mill Co. is putting in 1600 spindles and other machinery.

SOUTH CAROLINA.

Alcolu—Lumber, etc.—A charter has been issued to the D. W. Alderman & Sons Co. to do a general lumber, timber and merchandizing business; incorporators are David W. and Robert J. Alderman and David C. Shaw. The capital stock is \$150,000.

Anderson—Oil Mill.—P. K. McCully and others, lately noted, have applied for a charter for the Williamston Oil Mill with capital stock placed at \$20,000, and will erect a plant.

Bamberg—Cotton Mill.—The capital stock of \$80,000 having been subscribed for the Bamberg Cotton Mill, now completed, charter has been granted and operations will be commenced. W. G. Smith is general manager.

Blacksburg—Fertilizer Works.—A large fertilizer plant may be built by established Virginia and North Carolina companies now investigating. Jas. F. Hart, of Yorkville, is represented as the firm's attorney.

Charleston—Mercantile.—Chartered: The Druelle Clothing Co., the capital stock of which is \$5000.

Charleston—Mercantile.—A charter has been issued to J. Fred Lilienthal, A. F. C. Cramer, A. Bequest, P. H. Gadsden and Theo. Wenzel as incorporators of the Wenzel Piano Co., the capital stock of which is to be \$50,000. The company proposes to manufacture, sell and deal in pianos and all kinds of musical instruments, etc.

Columbia—Telephone System.—The Columbia Telephone Co. has been incorporated by W. V. Abrahams, W. B. Lowrance, F. D. Kendall, A. R. Stewart, R. G. Johnstone, T. J. Harper and J. B. Friday. The company is to start with a capital stock of \$5000.

Easley—Pottery.—Jno. Roper and Taylor Wompey have started a pottery.

Florence—Brick Works.—D. A. Layton is building brick works.

Georgetown—Planing Mill.—The Gardner-Lacey Lumber Co. will erect another planing mill, as reported last week.

Greenville—Mercantile.—Chartered: The Carolina Coal Co. by A. R. Morgan, R. M. Ballenger and H. M. Whitmore. The capital stock is to be \$1000.

Greenville—Mercantile.—Chartered: The Greenville Clothing & Shoe Co. with a capital stock of \$15,000 and the incorporators are F. W. Poe, W. E. Mays and J. H. Maxwell.

Greenwood—Cotton Mill.—The Greenwood Cotton Mill will add 5000 spindles.

Greer Depot—Cotton Mill.—M. L. Marchant, J. H. Payne, N. Cannon, D. Cannon and others have incorporated the Victor Manufacturing Co. for the purpose of erecting a cotton mill with capital stock of \$50,000.

Hopkins—Mercantile.—A charter has been issued to the Hopkins Economy Co., a general merchandise and milling concern.

Spartanburg—Sewers.—The city will hold an election to consider issuing bonds for sewers. Address the mayor.

Spartanburg—Cotton Mill.—It is reported that another small cotton mill will be built.

Spartanburg—Cotton Mill.—It is reported that another \$500,000 mill will be erected.

Walhalla—Cannery.—A charter has been issued to the Walhalla Canning Co. with paid up capital of \$1000. The incorporators are G. W. Pratt, W. L. Verner, W. D. Moss, A. P. Crisp, E. L. Herndon, C. W. Bouknight, C. S. Reid and F. S. Holleman.

Winnsboro—Mercantile.—The Ketchin Mercantile Co. has been incorporated by T. H., H. E. and M. E. Ketchin with a capital stock of \$4000.

TENNESSEE.

Adolphus—Flour Mill.—Cook & Pickel have put in new penstock, water-wheels, reels and other machinery.

Adolphus—Flour Mill.—Scott Bros. contemplate building a 25 barrel flour mill.

Bristol—Veneer Plant.—Jno. C. Anderson and Mrs. M. J. James have bought the Clinch River Veneering Co.'s plant for \$6500.

Chattanooga—Dynamite Works.—Incorporated: The Sterling Dynamite Co., by P. B. Griffin, Garnett Andrews, W. G. M. Thomas, F. H. Caldwell and Garnett Andrews, Jr.

Chattanooga—Buckle Works.—P. S. Griffith will start the manufacture of a patent harness buckle.

Chattanooga—Cotton Mill.—S. F. Henderson, of Massachusetts, is investigating for a cotton-mill site. Address for ten days care of Read House.

Clarksburg—Telephone Line.—A telephone line will be constructed to neighboring towns. Address J. H. Lory.

Ducktown—Copper Mines.—The Pittsburg & Tennessee Copper Co. has reopened the Polk county mine, and is taking out 160 tons of ore per day.

Harriman—Rolling Mill.—The Harriman Iron Co., if certain arrangements can be completed, will start its entire puddling and muck bar department and employ 150 men.

Knoxville—Electric Plant.—The Knoxville Electric Street Railway Co. will double its power plant.

Jackson—Cotton-ginners' Compress Works.—The Cotton Ginners' Compress Co. has been organized to introduce an improved cotton-ginners' compress; main office in New York, with Jno. E. Searles, of the Sngar Trust, as president, and branch office in St. Louis, Mo., with Jerome Hill as general manager.

Memphis—Cotton Mill.—R. W. Willey will endeavor to reorganize and put in operation the Bluff City Cotton Mills, containing over 14,000 spindles.

Memphis—Saw Mill.—I. M. Darnell & Son are adding to their extensive plant by putting in a band mill to cut thin stuff and small dimension stock.

Memphis—Lumber Mill.—The Bodman Lumber Co. has been incorporated by J. F. Bodman, Ross Gamble, A. T. Gamble, John H. Watkins and Pitkin C. Wright to do a general lumber business. F. D. Bodman & Co. write that they will probably erect a new mill.

South Pittsburg—Creamery.—L. C. Cutler and J. S. Ormand, of Chicago, are endeavoring to organize a company to erect a \$2500 creamery.

TEXAS.

Aransas Pass—Harbor Improvement.—The Aransas Pass & Harbor, Channel, Dock & Wharf Co., already noted as formed, has obtained charter. Its purpose is to construct and maintain deep-water channels from the waters of the Gulf of Mexico along and across Aransas harbor and Redfish and Aransas bays and the channels and inlets to the mainland; capital stock \$250,000; incorporators, J. B. Dibbrell, Emil Mosheim and T. P. Dibbrell.

Clear Creek—Cultivation.—H. L. Fenno, of Boston, will cultivate fruits. Address care of C. W. Wilkins, of Clear Creek.

Cleburne—Compress and Oil Mill.—The erection of a cottonseed-oil mill and compress is talked of.

Dallas—Compress.—The Clarksville Compress Co. has obtained permit to erect a cotton compress of 1000 bales capacity per ten hours and employ seventy five to 100 men; Jno. Martin, president, and Geo. N. Wells, general manager.

Dallas—Cotton Company.—A charter has been issued to the Howell Cotton Co.; purpose to sell goods, wares and merchandise on commission; capital stock \$10,000; incorporators, R. G. Clark, J. N. King, J. P. Cooper, M. F. Howell and others.

Dallas—Compress Works.—A report states that D. J. Loonie, of Dallas, will visit London, England, to consider a proposition from capitalists there for investing \$1,000,000 in a new cotton compress.

Gonzales—Telephone System.—The Gonzales Telephone Co., already noted as organized, has been chartered by Leslie P. David, A. J. Moore and H. L. Kokernot with a capital stock of \$30,000.

Hillsboro—Water Works and Sewers.—The city will expend \$18,000 to construct water works and \$2000 for sewerage system; J. C. Killough, chairman water committee.*

Houston—Box Factory.—H. C. Harding & Bros., lately noted, are now erecting a box factory. The building will be a wooden structure 65x52 feet, one and a-half stories high for the present and so constructed that it can be enlarged as business demands. The factory will be fitted with the most approved machinery to turn out boxes of all kinds; employ thirty hands at start.

Llano—Cotton Gin.—H. W. Finley will build a cotton gin in connection with grist mill already noted.

Laredo—Publishing.—The Laredo News Publishing Co. has been incorporated with \$1000 capital by Q. Villegas and others.

Laredo—Irrigation.—It is reported that an extensive irrigating enterprise will be established.

Llano—Stone Mill.—J. K. Finlay has contracted for granite-polishing machinery, lathes, etc.

Longview—Cannery.—A movement is afoot for a cannery. W. H. Carter, of Marshall, is interested.

Luling—Creamery.—The establishment of a creamery is afoot.

Luling—Cotton Mill.—Endeavors continue for the cotton mill lately noted. Otis McGaffey is interested.

Marble Falls—Cotton Mill.—Work is now in progress on the building for the proposed cotton mill. Messrs. J. H. & J. R. Barrett, of Henderson, Ky., are interested.

Milano—Mining.—The Rockdale Mining Co., A. B. Keer, of Muldoon, Texas, president, contemplates building a mining plant at Milano.

Rockport—Ice Plant.—The Rockport Ice Co. will erect a 30 ton plant.*

Rockport—Electric-light Plant.—The Rockport Light & Power Co. will erect an electric-light plant.*

San Antonio—Furniture Company.—J. W. Fair and R. Strickland, of Birmingham, and G. A. Stowers and W. P. Clower, of San Antonio, have incorporated the Stowers Furniture Co.; capital stock \$20,000.

San Antonio—Irrigating Plant.—The Bexar Irrigation Canal Co., lately noted as organized, has been incorporated, and its purpose is to construct an irrigating plant; incorporators, Edward Truehart and others; capital stock \$18,000.

San Patricio—Wine Manufacturing.—S. G. Borden will manufacture wine from his grape crop.

Temple—Cotton Mill.—J. E. Moore is corresponding with Northern parties relative to erection of a cotton mill.

Texas City—Cotton Compress.—The compress for Thos. Cullyford and associates, lately noted, will be built at once and contract has been let. The press will be of Morse pattern, 95 inch, and have hourly capacity of 1200 bales.

Victoria—Navigation, etc.—Application has been made for a charter for the Guadalupe River Navigation & Improvement Co., capital stock \$50,000, the incorporators being J. A. McFadden, F. C. Proctor, T. D. Wood, T. M. O'Connor and W. A. Wood. It is proposed to clear out the Guadalupe river from Victoria to its mouth and to establish and maintain a line of steamers upon the same.

VIRGINIA.

Big Stone Gap—Furnace.—The Jennie furnace, of the Appalachian Steel & Iron Co., bought at foreclosure sale by R. C. Ballard Thurston, of Louisville, Ky., representing the bondholders, will be operated. The second furnace, now partly built, will be completed, and the two will have a capacity of 250 tons a day.

Big Stone Gap—Iron Mines.—W. F. Culbert, of Cripple Creek, has leased and will develop iron-ore mines.

Buena Vista—Clay Works.—The Buena Vista Fire Clay Co. will put its plant in operation.

Culpeper—Water Works.—W. Nalb, C. E., will prepare plans for the water works reported last week.*

Danville—Bridge.—Pittsylvania county will build an iron bridge across the Sandy river near Danville. R. A. James must be addressed.*

Fredericksburg—Flour Mill.—Philip Carpenter, of New York, has purchased the Bridgewater Mill and will organize a company to operate it.

Fredericksburg—Ice Plant.—Report says that a \$30,000 ice plant will be built.

Goshen—Furnace.—The Virginia Iron Co. is reheating and improving the Victoria furnace, and it will go into blast about August 15.

Newport News—Cotton Mill.—The Newport News Cotton Manufacturing Co., authorized capital \$500,000, proposes erecting a cotton mill and is now taking subscriptions to stock. Lewis H. Blair, of Richmond, is president; A. S. Buford, of Richmond, vice president, and S. G. Wallace, of Richmond, secretary-treasurer. Particulars can be obtained of Smith & Elam, general agents, Richmond, Va.

Norfolk—Creosoting Plant.—The Norfolk Creosoting Co. will organize on the completion of its plant now building; same is to cost \$100,000, con-

taining four cylinders 100 feet long each. E. Christian and E. A. Beall are interested.

Norfolk—Land Company.—The South Oakwood Land Co. has been chartered with capital stock to be not more than \$20,000; E. B. Freeman, president; E. C. Foshburg, vice-president; H. L. Page, secretary and treasurer.

Pulaski—Furnace.—It is stated that the Pulaski Iron Co. will at once build a new furnace.

Richmond—Plow Works.—Starke's Dixie Plow Works will be rebuilt at once.

Salem—Knitting Mill.—Thomas & Mooney will start the manufacture of tidies, lambrequins, curtains and fancy tablecloths, lap robes, etc., from wool and silk.

Staunton—Telephones.—A mutual telephone exchange will be organized.

Suffolk—Brick Works.—It is said that a representative of Chesolin, Boyd, White & Co., of Chicago, is looking for a brick works site near Suffolk.

WEST VIRGINIA.

Charleston—Lumber Plant.—The Clay Lumber Co., to buy timber and manufacture it into lumber, own and operate saw mills, has been incorporated by Frank A. Keely, New Lexington, Ohio; Peter Carroll, Adam Conaway, Moxahala, Ohio; A. Bringham, B. F. Conkle, Junction City, Ohio; maximum capital stock \$100,000.

Charleston—Water-power, etc.—It is said that the New York parties who recently purchased the electric light and water works, etc., in Charleston are contemplating the development of the water-power of the Kanawha Falls. Chas. B. Couch, attorney, can probably give addresses of above parties.

Corinth—Brick and Tile Works.—The Oakland Coal & Coke Co. has completed a plant for the manufacture of brick, tile and sewer pipe; capacity for brick 20,000 daily.

Morgantown—Lumber Plant.—The Keystone Lumber & Mining Co., to acquire lands, manufacture and sell timber and the products thereof, has been incorporated by C. W. Newcomer, W. S. Hood, E. H. Steinman, Connellsville; S. H. Patterson, Andrew Wishart, Dunbar; capital stock \$50,000.

Morgantown—Lumber Plant.—The Webster Lumber Co., to manufacture lumber, sell and ship such products, has been incorporated by Worth Kelpatrick, Lloyd Johnson, James R. Balsey, R. Marietta, J. A. Zimmerman, Peter Soisson, Wm. Soisson; maximum capital stock \$200,000.

Sistersville—Oil Wells.—M. W. Woods, representing a Philadelphia company, will drill six wells for oil.

Webster—Bridge.—The county court will construct a new bridge. Address the clerk.

West Virginia—Coal Mines.—The Winifrede Coal Co., Theodore Wright, of Philadelphia, Pa., president, intends to develop its coal lands in West Virginia.

BURNED.

Grandin, Mo.—The Missouri Lumber & Mining Co.'s mill; loss \$23,000.

Kramer, Ga.—The Gress Lumber Co.'s shingle mill; loss \$5000.

Nashville, Tenn.—The building and printing plant of the African M. E. Church; Rev. C. S. Smith, manager; loss to machinery about \$18,000.

Richmond, Va.—Dixie Plow Works; loss \$5000. Company has two other plants at Hampton and Newport News.

Thunderbolt, Ga.—The Warsaw Hotel.

Toccoa, Ga.—The Southern Railway's depot.

Tuscanola, Miss.—W. C. Albertson's lumber mills; loss \$75,000.

Williamsport, Ky.—The Kentucky Lumber Co.'s mills; loss \$25,000.

Woodsboro, Md.—E. M. Garrett's carriage factory; loss several thousand dollars.

BUILDING NOTES.

Asbury, Md.—School.—Thos. Baldwin has contract to build schoolhouse.

Atlanta, Ga.—Auditorium.—A \$5000 auditorium is proposed to be erected. G. S. Lowndes can be addressed.

Baltimore, Md.—Dwellings.—Boston Fear will build thirty two dwellings.

Baltimore, Md.—Dwelling.—Joseph M. Cone will erect a large apartment-house.

Biscayne, Fla.—Hotel.—It is stated that H. M. Flagler, of New York, will build a hotel on Biscayne bay.

Bolivar, Tenn.—Asylum.—Sealed bids will be received until August 29 for the erection of an asylum for colored insane. Plans and specifications may be seen at the office of Austin Miller, 42 Madison street, Memphis, Tenn.; the comptroller's office, Nashville, Tenn., and the office of the superintendent at Bolivar, Tenn. Address J. P. Douglas, superintendent.

Centre, Ala.—Courthouse.—Plans, specifications and bids are wanted for new courthouse. Address R. R. Savage, judge.

Charlottesville, Va.—Bank Building.—The Vandegrift Construction Co. has received contract to erect the People's National Bank building.

Cleburne, Texas—Hotel.—J. W. Porter has formed a \$13,000 company to erect a hotel.

Clintwood, Va.—School.—A school building will probably be erected. Address board of trustees.

Cordele, Ga.—School.—The building committee of the Cordele Female College will receive bids until August 15 for the erection of a two story frame school building. Plans and specifications can be seen at office of Bruce & Morgan, Atlanta, or at Cordele. Address Lee B. Jones, chairman.

Dallas, Texas—Temple.—A committee is soliciting stock for a company to build an \$85,000 temple. Address A. V. Lane.

De Funiak, Fla.—College.—Contract awarded to R. E. Peterson, of Milton, for the erection of college annex to cost \$5500.

Durham, N. C.—Church.—Contract has been let to C. H. Norton for remodeling First Baptist Church, cost to be about \$10,000; plans by A. G. Baur, of Raleigh.

Elberton, Ga.—J. H. & W. T. Duncan will erect a large brick business-house.

Fairmont, W. Va.—Church.—J. C. Fulton, Uniontown, Pa., has prepared plans for a Presbyterian church to be erected at Fairmont, to have church bell, pews and chairs, furnace; cost \$25,000.

Fort Worth, Texas.—W. L. Gatlin will remodel into a four-story building the Mansion Hotel.

Fort Worth, Texas.—Sanguinet & Messer have contract to erect an \$8000 building for Dr. Prince, of Chicago.

Fort Worth, Texas—Depot.—A \$200,000 union depot will be built.

Galveston, Texas—Hall, etc.—Leon N. Levi proposes the erection of a large hall building, with pavilions on water, roof gardens, etc.

Goliad, Texas—Bank Building.—The Bank of Goliad may erect a building, but not until next year.

High Knob, Ky.—Hotel.—Patrick Hagan is reported as building a hotel.

Houston, Texas—Engine-house.—The city will build an engine-house. Address the mayor.

Hyattsville, Md.—Hall.—Plans have been prepared for a hall building three stories high, plate glass and iron front, and have steam or furnace heat; second floor to be finished for offices; third floor to contain hall for Masonic temple, with necessary lodge room, furniture, etc. Appleton B. Clark, architect, will receive proposals for building.

Jacksonville, Fla.—Business Block.—H. G. Airey may be addressed relative to the business block to be erected by the Metropolitan Company.

Jacksonville, Fla.—Hall.—The German Gesang and Turn Verein Society will erect a hall.

Knoxville, Tenn.—Theatre.—The Grand Opera House Co. will erect the proposed theatre, store and office building, to be 89x242 feet in size, three stories, built of pressed and ornamental brick, have electric lighting, passenger elevator, steam heating, bathroom outfit; cost \$60,000. Baumann Brothers are consulting architects.

Kuttawa, Ky.—Hotel.—It is reported that a company has been organized to build a \$25,000 hotel.

La Plata, Md.—Courthouse.—The county commissioners have ordered an issuance of \$20,000 in bonds to build a courthouse.

Louisville, Ky.—Dwellings.—Maury & Dodd have prepared plans for a store and dwelling for S. Jacob, to have marble mantels, electric bells and lighting; cost \$5000. C. S. Kellar has prepared plans for a residence for N. A. Nash, to have electric bells and lighting; cost \$4000.

Louisville, Ky.—James Clark will erect an \$8000 building.

Lynchburg, Va.—Depot.—Contract awarded to Chesterman & Co., of Richmond, for the Southern Railway's new freight depot to cost about \$20,000.

Madison, Ga.—School.—Contract awarded to Nicholas Ottner at \$456 to erect school building.

Marlin, Texas—School.—The city will issue bonds to erect a \$7000 schoolhouse. Address the mayor.

Monroe, La.—Hospital.—Bids will be opened August 12 for erecting the Monroe Charity Hospital after plans by H. C. Voss. Address A. A. Forsythe.

New Iberia, La.—School.—Contract awarded to Jno. Webb for erection of a \$10,000 schoolhouse.

Norfolk, Va.—Hotel.—The hotel at Virginia Beach may be enlarged. Address B. P. Holland.

Norfolk, Va.—School.—J. C. Teague will prepare plans for the new public schoolhouse.

Norfolk, Va.—School.—Sealed proposals for the erection of a public-school building will be received by the building committee until August 29. Plans and specifications can be had at the office of J. C. Teague. Proposals must be addressed to John B. Whitehead, chairman, No. 8 Bank street.

Owensboro, Ky.—Plans by Val. P. Collins, of Louisville, have been accepted for the new \$25,000 V. M. C. A. building.

Paducah, Ky.—Hospital.—Contract has been let at \$20,000 for a hospital for the Chesapeake & Ohio Southwestern Railroad's employees.

Palatka, Fla.—The Wilson Cypress Co. is extending its wharfage facilities by the addition of 1500 feet to the large dock.

Palatka, Fla.—Thomas Keating is erecting three cottages.

Palm Beach, Fla.—Hotel.—Henry M. Flagler's hotel, now building, will contain 250 rooms, and work is now being pushed.

Roanoke, Va.—School.—The city council has ordered a sale of bonds for \$12,000 to build a schoolhouse. Address the mayor.

Ruston, La.—School.—Contract let to J. M. Goslin for erection of \$25,000 school building.

South Boston, Va.—Church.—The Baptist congregation will build a church. Address the pastor.

St. Louis, Mo.—Church.—St. Teresa's Catholic congregation, it is said, has decided to erect a church edifice to cost about \$200,000 and be constructed of rock and surmounted by a stone tower 200 feet high.

St. Louis, Mo.—Incorporated.—The Swedish Evangelical Getsemane Church of St. Louis by C. A. Lindahl, pastor, and others.

St. Louis, Mo.—Church.—Chas. E. Illsley has prepared plans for a church for the Cumberland Presbyterian Church, to have iron beams and columns, electric lighting, boiler, steam heating; cost \$10,000.

St. Louis, Mo.—Church.—Link, Rosenheim & Ittner have prepared plans for a church for the Shaare Emeth congregation, to have architectural ironwork, iron beams, electric lighting, asbestos, steam heating; cost \$100,000.

St. Louis—Dwellings, etc.—A. M. Baker has prepared plans for a store and flat building for Judge S. Boehm, to have electric bells and lighting; cost \$12,000. Same architect has prepared plans for store and flat building for Florence McAuliffe, to have electric bells and lighting; cost \$8000. Same architect has prepared plans for a flat building for Colonel Butler, to have iron mantels, electric bells and lighting; cost \$6000. J. L. Wees has prepared plans for a residence for L. D. Dozier, to have electric bells and lighting, hot-water heating; cost \$50,000. H. E. Roach & Son have prepared plans for a store and flat building for L. B. Ely, to have architectural ironwork, plate and stained glass, electric lighting, furnace; cost \$10,000. Louis Horman has prepared plans for a residence for Anton Hartman, to have galvanized-iron work, iron crestings, iron mantels, electric lighting, furnace; cost \$5200.

St. Louis, Mo.—Market.—J. L. Wees has prepared plans for a market and store-building, to have metal, tin and gravel roof, architectural ironwork, iron beams, electric bells and lighting, hydraulic passenger and freight elevators, engines, hot water heating; cost \$300,000.

Jampa, Fla.—Hotel.—J. A. Wood and associates will build a steel and brick fire-proof hotel to contain 100 rooms and cost \$200,000.

Temple, Texas—Engine-house.—The city will build an engine-house to cost \$10,000.

Tifton, Ga.—Hotel.—Jno. A. Sibley has purchased site and will erect a \$40,000 hotel.

Tuskegee, Ala.—Warehouse.—C. W. Thompson has awarded contract at \$3500 for a cotton warehouse.

Washington, D. C.—The new Y. M. C. A. building noted last week will be erected as soon as possible and is to cost not less than \$150,000. Bids will be wanted. Address James E. Pugh, general secretary.

Wheeling, W. Va.—Castle.—Sealed proposals will be received by the building committee of the Pythian Castle Association for building a three-story brick building. Bids will be opened August 10. Plans and specifications can be seen at the Builders' Exchange and at the office of Chas. P. Hamilton & Son, architects. Address George W. Weisgerber.

RAILROAD CONSTRUCTION.

Railroads.

Alachua, Fla.—The Atlantic, Suwanee River & Gulf road, it is stated, is to be completed by the Ambler Lumber Co. The main offices of the road are to be removed to Alachua.

Americus, Ga.—President Williams, of the Georgia & Alabama (Savannah, Americus & Montgomery), states that the company has secured the necessary rails to extend from Meldrim to Savannah at once and has \$700,000 ready to complete the road into Savannah.

Calvert, Texas.—It is stated that the people of Calvert and the Houston & Texas Central Company have made arrangements by which the road to the coalfields near Calvert is to be built at once. It will be six miles long. Address Dr. H. A. Lewis.

Crowley, La.—It is expected to complete the fifteen miles of the Gueydan branch of the Southern Pacific system by October 1. Most of the road has been graded and tracklaying has begun.

Cumberland, Md.—It is reported that the West Virginia Central system will endeavor to secure the bed of the Chesapeake & Ohio Canal and build an extension of its line from Cumberland to

Georgetown. Henry G. Davis, at Elkins, W. Va., is president.

Denison, Texas.—The Denison & Pacific Suburban Railway Co. has been organized to build an extension of the Texas & Pacific into Denison. L. S. Thorne is president, and R. C. Sherman, vice president. The distance is about ten miles.

Elkins, W. Va.—The West Virginia Central & Pittsburg, it is reported, may extend its system to connect with the Chesapeake & Western now building. Henry G. Davis is president.

Gadsden, Ala.—The Chattanooga Southern Company has asked for a charter to build forty-two miles of road from Gadsden to the Georgia State line. Its present terminus is Gadsden. Newman Erb is one of the directors.

Galveston, Texas.—The Gulf & Interstate Company, of which E. De Normandie is president, is arranging to have a terminus and wharves on Galveston Island, and to operate a car transfer from Bolivar Point to the island.

Harriman, Tenn.—It is reported that the Louisville & Nashville has bought the Tennessee Central, of which Hon. Jere Baxter is president, and will complete it to Knoxville. The road is now under construction between Knoxville & Nashville.

Jacksonville, N. C.—The railroad being built by the Parmele-Eccleston Lumber Co. is a tram line for logging purposes.

La Fayette, Ala.—The scheme to build a road from La Fayette to Opelika has resulted in the formation of a company with \$50,000 capital. J. C. Griffin and A. J. Driver, of La Fayette, are interested; also J. T. Cowan, of Opelika.

Little Rock, Ark.—The Arkansas City & Western Company has been formed to build a road from Arkansas City to the Arkansas river and Lake Village, seventy miles. M. W. Lewis, of Boston, Mass.; J. W. Dickinson and James Murphy are interested. The capital is \$1,500,000.

Minneapolis, Texas.—About three miles of the line between Mineola and Pittsburg have been graded. W. B. Teagarden is secretary of the company, and R. H. Bruce, engineer. The road will be forty miles long.

Mobile, Ala.—It is reported that engineers of the Mobile & Ohio are to examine the unfinished Montgomery, Tuscaloosa & Memphis road with the view of securing and completing it.

Norfolk, Va.—It is reported that the Atlantic & Danville Company, of which B. Newgass is president, may extend its line west of Danville.

Norfolk, Va.—General Superintendent B. P. Holland, of the Norfolk, Albemarle & Atlantic, advises the MANUFACTURERS' RECORD that as soon as the receivership of the line terminates the new company may change it to standard gage and build a branch line of twenty-five miles.

Pine Bluff, Ark.—It is reported that the Manufacturers' League has induced several Boston parties to take an interest in the proposed road from Pine Bluff to Malvern.

Rector, Ark.—The Kennett & Rector Railway Co. has been formed with \$120,000 capital to build a line from Rector to Kennett, Mo., twelve miles. W. F. Shelton and T. E. Baldwin are members of the company.

Riverside, Ala.—The Lathrop-Hatten Lumber Co. is building a tramroad about five miles long into timber tracts near Riverside.

Savannah, Ga.—The Georgia & Alabama Company, it is reported, has arranged for eleven miles of line to shorten its route from Savannah to Montgomery, and is preparing to build from Meldrim to Anderson, Ga., seventeen miles. J. Skelton Williams, of Richmond, is president.

Shelbyville, Ky.—Work has begun on the new line of the Louisville & Nashville between Shelbyville and Christiansburg.

Shreveport, La.—It is stated that contracts for constructing the Kansas City, Pittsburg & Gulf extension from Shreveport to Moorhead have been let. Richard Gentry is in charge of the work.

Shreveport, La.—The stockholders of the Kansas City Terminal Construction Co. have voted to increase the capital stock to \$3,000,000. The proceeds of the increase will be used to build the extension of the Kansas City, Pittsburg & Gulf Railway to Shreveport.

Tallapoosa, Ga.—About \$10,000 in stock has been taken in a company which proposes to build a line from Tallapoosa into the lumber district. A. I. Head and I. M. Watson are interested.

Warren, Texas.—C. A. Efling has begun surveying a proposed railroad from Warren to Livingston. The distance is thirty miles.

Electric Railways.

Baltimore, Md.—Pepper & Register, of Philadelphia, have received the contract for the overhead electrical work on the Catonsville division of the City & Suburban Railway system.

Baltimore, Md.—The contract for building the electric line from Baltimore to Washington, with a branch to Ellicott City, Md., has been let to E. D. Smith, of Philadelphia. It will include thirty-six miles of double-track trolley road laid with 80-pound steel rails. Power stations will be built

to develop at least 3000 horse power. Henry T. Douglas, Equitable Building, is chief engineer.

Brunswick, Md.—People in Brunswick are considering the construction of an electric road from Brunswick to Middletown by way of Burkettsville.

Forest Glen, Md.—Benjamin F. Leighton, J. C. Dowell and others are endeavoring to form a company to build a line from Washington to Woodside, Linden and Forest Glen.

Nashville, Tenn.—The Citizens' Rapid Transit Co. is now completing a two-mile extension in the western suburbs.

Nevada, Mo.—The franchise to operate a street railway in Nevada has been sold to the Nevada Electric Light Co.

Tuskegee, Ala.—A construction company has made a proposition to the town to build an electric road to Cheraw if Tuskegee will raise \$5000 as a bonus. The distance is about six miles.

Washington, D. C.—It is stated that James B. Colegrove and others, who incorporated the Washington, Burnt Mills & Sandy Springs electric road, have arranged to issue \$750,000 in bonds to begin work. The road is planned from Takoma Park to Brighton, Edlitt City and Frederick, Md., in three divisions, making eighty miles in all.

Westminster, Md.—The Westminster & Union Mills Electric Co., which proposes building a line between the points named, has elected T. H. Shriver, president, and Charles H. Vanderford, treasurer. President Frank Brown, of the Baltimore Traction Co., is one of the directors.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Bakery Machinery.—Wanted, machinery for steam bakery, fifteen to twenty-five barrels capacity, for navy bread, pilot bread, loaf bread, cakes, etc. Address the Young Men's Business League, Pensacola, Fla.

Baking Machinery.—E. F. Averill, Tampa, Fla., will buy machinery and outfit for cracker bakery.

Belted Appliance.—A. E. Bailey, Natchez, Miss., wants an idler for main driving belt; write for full particulars.

Boiler.—Wanted, a thirty horse-power boiler. Address N 6, Sun Office, Baltimore, Md.

Boilers.—Proposals will be received until August 14 for disconnecting and taking out the old boilers and supplying, putting in place and connecting two new locomotive tubular boilers on board the United States light vessel No. 43 at New Orleans, La. Address J. B. Coghlin, U. S. N., light-house inspector, New Orleans.

Boiler and Engine.—See "saw mill."

Boiler and Engine.—The Montgomery Cotton Mills, Montgomery, Ala., wants a 100 horse-power boiler and a 250 horse-power Corliss engine.

Boiler, Engine, etc. (Marine).—John Parker, Westwego, La., wants boiler and engine, wheel shafting, etc., for a small double-propeller boat; engine 9x9.

Bottles.—R. R. Moore, Moriah, N. C., wants to buy ink bottles, one-half pint and one pint capacity, cheap, and shoe polish bottles and stoppers with sponge and wire stem.

Brick Machinery.—Frank A. Terpenning, Prairie Grove, Ark., will need a cut-off table for six to 12-inch tile and one for small tile.

Bridge.—R. A. James, Danville, Va., will receive bids for the construction of an iron bridge and approaches; to be ordinary road bridge sixty-five to seventy feet long.

Cannery Machinery.—W. M. Burt, Monroe, N. C., needs a corn cutter and silker.

Cotton Mill.—J. A. McAllister, secretary, Lumberton, N. C., wants 2500 spindles, etc.; machinery to suit.

Cotton Mill.—J. D. Sutton, Woodbury, Ga., wants machinery for cotton mill.

Cotton and Knitting Machinery.—E. D. Steele, High Point, N. C., wants machinery for manufacturing hosiery, back bands and window cords.

Cupola and Gear Cutter.—The Asheville Supply & Foundry Co., Asheville, N. C., wants a gear cutter; a second-hand one would do if in good condition and cheap. It also wants cupola for foundry.

Dredging.—Sealed proposals in duplicate, will be received until August 21 for dredging in

Negro Cut, Indian river, Fla. All available information furnished on application. Address A. M. D'Armit, first lieutenant engineers, St. Augustine, Fla.

Electric-light Plant.—The Montgomery Cotton Mills, Montgomery, Ala., wants electric-light plant of 200 sixteen candle-power lights.

Electric-light Plant.—The Rockport Light & Power Co., Rockport, Texas, wants bids on an electric-light plant to supply 1500 consumers and light four miles of streets.

Electric-light Plant.—The city of Owensboro, Ky., may possibly again want bids on electric-light plant. Address the mayor.

Electric light Plant.—The city of Versailles, Ky., will probably want bids again on electric light plant. Address the mayor.

Electric Plant.—See water works.

Engine.—The Woodstock Iron Co., Anniston, Ala., want one new engine for furnaces.

Engine.—J. A. McAllister, secretary, Lumberton, N. C., will need 150 horse-power engine for cotton mill.

Engine.—Wanted, one upright fifteen to twenty horse power engine; must be in first-class condition and cheap. Address the Louis McMurray Packing Co., Frederick, Md.

Engine.—Wanted, one upright stationary steam engine, twelve or fifteen horse-power, in good order. Address W 664, Sun Office, Baltimore, Md.

Flour Mill.—W. L. Cutting, Statesville, N. C., will soon contract for a flour mill.

Furniture Machinery.—Vinzant, Futch & Co., High Springs, Fla., want furniture machinery.

Gold Stamp Mill, etc.—The Triple Lead Gold Mining Co., of North Carolina, wants a 10-stamp mill to crush and separate free milling ores, and a larger plant to work sulphide ores. Address company, care of Chas. Hall Davis, attorney, Petersburg, Va.

Heating Apparatus.—Lewis Johnson, Box 1200, New Orleans, La., wants bids for furnishing steam-heating apparatus.

Heating Apparatus.—Proposals for the erection of pumping plant, trestle and tank, fire-plugs, distributing underground pipe and connections with creek, also suitable heating furnace or steam supply with radiators and netting protectors, for the county poor asylum will be received by the board of revenue and road commissioners of Mobile county. General specifications can be seen at the office of Sage, Baker & Co. or Jno. T. Bauer, chairman. Bids will be received either separately or as a whole. Bids will be opened August 13. Address Geo. E. Sage, president.

Heating Apparatus, etc.—Proposals will be opened August 21 for installing heating and ventilating apparatus in the postoffice building at Columbus, Ga. Address W. M. Aiken, supervising architect, Washington, D. C., or see advertisement in MANUFACTURERS' RECORD of August 9.

Heating Furnaces.—Wanted, to buy a wood furnace for the First Presbyterian Church of Durham, N. C. Address Q E. Rawls.

Hoisting Engine.—Wanted, a light hoisting engine. Apply at 508 Law Building, Baltimore, Md.

Hoisting Engine.—Poulter & Co., No. 206 Bullitt Building, Philadelphia, Pa., are in the market for a good ten or two horse power hoisting engine, with double cylinders, double drum and boiler, all complete and ready for use.

Ice Plant.—F. P. Gates, Manteo, N. C., wants a 10 or 12 ton ice machine.

Ice Plant.—The Rockport Ice Co., Rockport, Texas, wants bids on a 30 ton ice plant.

Locomotive and Rails.—Geo. Peacock, Selma, Ala., wants small locomotive for lumber hauling; also three and a-half miles of rails, second-hand.

Lumber-mill Machinery.—The Clay Lumber Co., Charleston, W. Va., will probably want lathe and stove mill, etc.

Mattress Springs, etc.—The Roseland Furniture Co., Roseland, La., wants woven-wire and coil springs for mattresses.

Naptha Launch.—T. A. Casselly, Belcamp, Md., wants to buy or rent a naptha launch in good condition.

Planing Mill.—M. W. Carroll, Dallas, Texas, will buy planing mill complete.

Printing Presses, etc.—M. Stackhouse, Marion, S. C., wants catalogues and price-list of hand job printing presses, type, etc.

Pumps.—W. E. Anderson, Little Rock, Ark., wants pumps to pump at rate of 275 cubic feet per minute, lift of twelve feet. Full particulars are wanted regarding drainage systems and necessary machinery.

Rails, etc.—The W. T. Smith Lumber Co., Chapman, Ala., is in the market for a couple of miles of 35-pound steel rail and fastenings, either first-class relay or new.

Railroad Equipment.—The Clay Lumber Co., Charleston, W. Va., will probably want engine and cars for narrow-gauge tramroad.

Railroad Equipment, Cars, Rails, etc.—The La

Fayette Railway Co., La Fayette, Ala., is in the market now, and ready to inspect and contract for twenty-two miles of second-hand 40 to 50-pound relaying T rails; will consider bids on steel or iron; 440 kegs of 4½x½ spikes, splice-joints and nuts for same; also for two dummy engines, 12x16 or 12x18 cylinders, 35 or 36-inch drivers; two closed passenger coaches, three box cars and three flat cars and one push car; this equipment all to be second-hand, but in good condition. In quoting please state how long in use, builders, etc., and locate.

Railway Cars and Material.—The West Virginia Southern Railway Co. will buy three 30-ton second hand box cars, one 27 to 30-ton locomotive and 550 tons of good relaying 56-pound steel; also would like to have prices on twenty-five or thirty drop bottom gondolas. Address R. T. Herndon, president, Charleston, W. Va.

Rice Machinery.—J. A. Sapp, Pennick, Ga., wants to buy new or second-hand rice machinery.

Saw Mill.—Wm. T. Spencer, Jasper, Fla., wants full outfit for saw mill, including twenty-five or thirty horse-power engine and forty horse-power boiler.

Sprinkling Wagon.—Wanted, a sprinkling wagon, broad-tread wheels, to hold from 400 to 600 gallons; state lowest price. Address Jos. C. Hughes, 2115 East Baltimore street, Baltimore, Md.

Telephone Equipment.—Rawlings & Fish, Berea, Ky., want equipment for fifteen miles of telephone.

Tobacco Machinery.—See item under St. Louis, Mo.

Water Works.—The city of Jasper, Ind., will open bids August 24 for supplying water-works material. Address the mayor.

Water Works.—Contract will be let at once for complete water-works system (cost about \$20,000) at Culpeper, Va. Address R. F. Booten, chairman committee.

Water Supply.—See "heating apparatus."

Water Works.—The city of Elizabethtown, Ky., will receive bids until August 19 for the construction of water works. Address R. L. Winter-smith, mayor.

Water Works.—The mayor and aldermen of Canton, Miss., will receive sealed proposals for the erection of a system of water works and electric-light plant, according to plans and specifications on file. Submit bids for building the works for the city, and one for the contractors to receive a franchise from the city for a term of twenty years, and supplying thirty-seven water hydrants for fire purposes. All bids must be in by September 2. Address H. W. Latimer, city clerk.

Water Works and Sewers.—Bids will be wanted for \$18,000 water works and \$2000 sewers at Hillsboro, Texas. Address J. C. Killough, chairman water committee.

Wind-mill.—B. R. Meaders & Sons, Dahlonga, Ga., want to buy a wind-mill.

Woodenware Machinery.—The High Springs Oil Co., High Springs, Fla., wants woodenware machinery.

TRADE NOTES.

THE Crompton Co., of Crompton, R. I., has placed a duplicate order for a number of drawing frames with the Pettie Machine Works, Newton Upper Falls, Mass.

A CHICAGO office has been established by the Phoenix Iron Works Co., Cleveland, Ohio. The office is located at 1430 Old Colony Building, with H. A. Callon in charge.

THE sixteen boilers of the new \$3,000,000 city hall at Philadelphia have just been equipped with No. 5 Reliance safety water columns manufactured by the Reliance Gauge Co., of Cleveland, Ohio. They were adopted after a prolonged trial test of one column.

A NUMBER of large shipments of corrugated iron for roofs and sides of manufacturing plants have recently been made to various Southern localities by Wm. B. Scaife & Sons, of Pittsburg, Pa. This firm also reports an increased demand for iron frame buildings, trusses, columns, etc., in this district. They manufacture and erect these structures in all parts of the country.

AN indorsement from a strong quarter is conveyed in the recent award of a contract for supplying the Port Royal docks with 561 barrels of "Commercial" Rosendale cement. William M. Bird & Co., Charleston, S. C., secured this contract and are supplying a large quantity of this cement for use in the South. "Commercial" cement is made by the Copley Cement Co., of Copley, Pa.

A DEPARTMENT has been added by the Builders' Iron Foundry Providence, R. I., for the manufacture of wood-polishing wheels, grinding and polishing machinery with suitable countershafts. This concern with its great resources and expert workmen will no doubt take the same leading position with its new departure as has been won by its other productions. Mr. William C. Buell is in charge of the new feature, and his long experience backed by unexcelled facilities gives

assurance that only high-class goods will be turned out.

For a number of years the Bates hand elevator has been accepted as a standard of efficiency. Its utility is shown by the general appreciation it has received. Over 6000 of these elevators in daily use give the best assurance as to their satisfactory service. Wherever merchandise is transferred from one story to another, their usefulness will be evident. James Bates, 1 to 5 President street, Baltimore, is the patentee and builder of these elevators.

THE Star City Foundry & Machine Co., of La Fayette, Ind., is a newly-organized stock company composed of Messrs. Kreiter, Graves and Southworth. The company will do a general machine shop business, as well as manufacture a few specialties. It is now erecting buildings, and has placed an order with the Lodge & Davis Machine Tool Co., of Cincinnati, Ohio, for the entire equipment of its plant, including lathes, planers, drills, milling machines, bolt cutters, etc. The Lane & Bodley Co., of Cincinnati, Ohio, will supply the steam plant.

THE Mercantile Trade List Supply Co., which is located at 601 Times Building, Pittsburg, Pa., is supplying a wide range of useful information to concerns issuing advertising matter. Of the great quantities of catalogues, price-lists, etc., which are sent out by manufacturers and others introducing equipment, machinery, special and staple articles, a large percentage is sent to unfruitful sources. This company has collated with care and at much expense authentic lists of persons and firms who are interested in various wares and likely to take hold of improved products. These lists are properly classified and in convenient shape for immediate use. By an inadvertence it was recently stated that this concern was located in Chicago.

An opportunity is available to the proper parties to take hold of and introduce in the South an English device that has met with considerable success abroad. It is the Meldrum patent furnace for forced drafts or waste fuel. The boiler house of a cotton mill is pointed out as a place where much saving or great waste is possible. By means of the Meldrum appliance instances are cited where the cost of fuel has been reduced from 10 to 50 per cent. We are informed that many of the largest spinners and manufacturers in England, Germany, Russia and India have adopted the Meldrum system with gratifying results. A great advantage of this system to which the attention of Southern mill-owners is called is that it is quite independent of chimney draught. It is stated that it is unnecessary to build high chimneys where this system is employed. Correspondence should be addressed to Meldrum Bros., Atlantic Works, City Road, Manchester, England.

A CONCEPTION in art stained glass work which is attracting general notice among critics is the production of C. W. Asbrand, 280 Erie street, Cleveland, Ohio. Some novel ideas are introduced to heighten the artistic effect. The work is after Hoffman's "Christ in Gethsemane," in which the central figure is life-size. Much favorable comment has been evoked by the work. It is constructed so as to look well from the inside during the day and from the outside when the church is lighted. Among the orders for stained glass work being executed by Mr. Asbrand are the following: Methodist Episcopal Church, Glenville, Ohio; German Lutheran Church, Liverpool, Ohio; Grace Reformed Church, Columbiana, Ohio; First Congregational Church, Mt. Vernon, Ohio; Swedish Methodist Episcopal Church, Cleveland, Ohio; First Presbyterian Church, New Castle, Pa.; Harrison county courthouse, Cadiz, Ohio; banking rooms Cleveland Trust Co., Cleveland, Ohio, and a number of residences.

THE Goulds Manufacturing Co., Seneca Falls, N. Y., reports the following sales of its power pumps: Winnipisogee Paper Co., Franklin, N. H., one 14x10 inch and one 12x10 inch double-acting suction pumps for use with paper machines, and one 7x8 inch stuff pump for pumping stuff to paper machines; Archibald Rogers, Hyde Park-on-Hudson, N. Y., one 2½x4 inch triplex pump for water supply; Capital Electric Light, Motor & Gas Co., Boise, Idaho, one 1½x2½-inch triplex pump for water supply; F. S. Blackall, New York, one 1½x2½ inch triplex pump for water supply; New Orleans Railway & Mill Supply Co., New Orleans, La., four 5x8 inch triplex pumps—these pumps are operated by electric motor, direct geared, all being mounted on one bed plate; Jay Paper Manufacturing Co., Jay, Me., one 7x8 inch triplex pump for pumping stuff to paper machines; Hendricks Manufacturing Co., Detroit, Mich., one 5x8 inch triplex pump for pumping calcium brine; Herkimer Paper Co., Herkimer, N. Y., one 5x8-inch triplex pump for boiler feeding; Nahum, Perry & Co., Attleboro, Mass., one 7x8 inch triplex pump for water supply; Thorndike Manufacturing Co., Thorndike, Mass., one 5x6 inch triplex pump for water supply; Tidewater Oil Co., Bayonne, N. J., eight 4x6 inch triplex pumps for water supply and other pumping operations of refinery work; Naim Linoie & Co., Leward, N. J., one 4x4-inch triplex pump for

water supply; Goodell & Co., Antrim, N. H., one 1½x2½-inch triplex pump for pumping feed water; S. W. Luitweiler, Los Angeles, Cal., one 6½x8-inch triplex pump for water supply; Howard Iron Works, Buffalo, N. Y., one 8x8-inch triplex pump for water supply. The company also reports that it has sold the city of Memphis, Mo., an 8½x10 inch triplex water-works pump, having capacity of 375,000 gallons a day, and to the city of Oregon, Ill., a 10x12 inch triplex water-works pump having capacity of 750,000 gallons a day, and to the Massachusetts Mills in Georgia, Rome, Ga., a triplex water-works pump having capacity of 375,000 gallons a day. This pump is to be used to supply water to Linsdale, Ga.

THE broad range of production which now characterizes the brick-making business has led to an evolution in the class of equipment and machinery employed in this industry. This change affords an interesting study of the aggressive spirit which dominates the American inventor and mechanic and the progressive policy which moves the modern machinery builder. Quick to note the tendency for better methods and prompt to supply more economical and rapid machinery, the American constructor and inventor leads the world in meeting this demand. In the production of brick machinery such a combination has achieved success that has won the approbation of the practical men of this industry. A leader in this advancement is the Henry Martin Brick Machine Manufacturing Co., of Lancaster, Pa. The history of this concern is an emphatic illustration of what American ingenuity and enterprise can accomplish. Its policy seems to have been to build the best, and then by closer study of later requirements to improve on the production. As a natural consequence the company has established a business whose range has no territorial limitations, and whose patrons include many of the most important brick makers of the country. The rapid growth of its trade has made necessary greater accommodations. Awake to the needs of its own affairs, as well as to the wants of its customers, the company has just moved into a new and model plant. It is provided in these new quarters with much better facilities for carrying on the work of manufacturing brick machines, wheelbarrows and brick molds than at the former location, but the business is increasing to such an extent it is compelled to further extend this plant by erecting a new foundry on a plot of ground adjoining the premises. The sales of the company's brick molds alone to July 1 more than equaled the total output in this branch for all of last year, and an encouraging volume of trade in the brick-machine and wheelbarrow departments is noted. The company recently issued a very attractive catalogue, showing the different lines of manufacture and also giving a list of the users of its machines.

TRADE LITERATURE.

AN extended description of economic safety hoists is given in a pamphlet sent out by Speidel & Roeper, manufacturers, Reading, Pa. The points of advantage in these hoists are simplicity, safety, economy, quick action, strength and durability. No parts of the hoist are cased or hidden from view. The brake does not absorb any of the applied power for raising a load, and acts automatically whenever the load hangs suspended from a hoist. Two speeds are secured from Speidel's patent economic hoists—one for the full capacity of the hoist, the regular speed, and a second speed twice as fast. With this hoist one man can lift the full load up to 5000 pounds capacity; two men can lift it up to 10,000 pounds capacity, while for the larger sizes not more than three men are, it is said, required to raise the full load.

A CATALOGUE of electrical specialties issued by J. Grant High & Co., 123 North Third street, Philadelphia, Pa., shows the improved devices made by this firm. The success attained by the switchboards which it manufactures is explained by a reference to the method employed in their manufacture. They are designed by competent draughtsmen, and are cast out of a superior alloy of metal, making the finish like gold and giving a high carrying capacity. This capacity is rated from careful calculation, and a guarantee is given that the switches will not heat. All the switches have hard-rolled copper blades, with jaws, making a perfect contact, and are mounted on selected Vermont slate bases, free from conducting veins. The catalogue shows a number of styles of switches adapted for different service. Connections for heavy conductors, tablet boards, etc., are also described.

THE development of the manufacturing interests of the West and South and the introduction of electric-lighting plants in cities and towns is creating a growing demand for that type of the steam engine which shall perform a varying quantity of work, with a high degree of economy, and which shall give a practically uniform rate of speed under varying loads and steam pressures. It was to meet this demand that the Columbian Corliss engine was designed. The selection of an engine is largely controlled by confidence in its regular performance. Experienced men know

full well the value of a reliable engine—one that can be depended upon and about whose performance no anxiety need be felt. The reputation of the Corliss engine in this respect is established. A comparison brings out the Columbian in a favorable light among the best of the Corliss type in design, material and workmanship. The history of the development of this class of engines is very interesting, and a pamphlet issued by the Lane & Bodley Co., Cincinnati, Ohio, builder of the Columbian engine, will prove instructive reading to the steam-users. It sketches the evolution of the Corliss type, and points out the advancement achieved in the perfection of the Columbian model.

A USEFUL contribution to the literature of the India-rubber industry is a pamphlet of 100 pages issued by the New York Belting & Packing Co., of New York city. Sketches and descriptions enliven the publication, and show in an interesting manner the various uses of rubber, and give much information as to the methods of manufacture. This catalogue is introduced with some notes on the history of the New York Belting & Packing Co., Limited, with illustrations and descriptions of its three factories. Some account of its trade-marks follows, after which comes the department of rubber belting, to which thirteen pages are devoted. There is an account of rubber belting in general, followed by detailed descriptions of the belting made by the company for grain-elevator use, threshing machines, paper mills, etc., price-lists of leather and rubber belting, and information of value on the use and care of belts, rules for calculating the speed of pulleys, rules for calculating horse-power, how to splice belts and other similar information. Twenty-four pages are devoted to rubber hose, with an account of its manufacture. Steam hose, which is an important product of this company, occupies three pages, with tables and lists. One page is given to air brake hose, two to fire hose, four to cotton hose and the "Leatherite" treatment of same, three to suction hose, seventeen to mats and matting, including the company's new patented rubber tiling, which it has supplied to the new steamers St. Louis and St. Paul; eight pages are given to packing, gaskets and tubing, and six to emery wheels. Considerable space is devoted to specialties, of which a large variety are illustrated, together with remarks on vulcanization and mold work. Bicycle tires are briefly disposed of, as a separate pamphlet has been published on this subject. A double index, new and convenient in arrangement, gives the pages of both the lists and descriptions of articles.

A FAVORED REGION.

Successful Fruit-Growing Along the Georgia Midland Railroad.

WARM SPRINGS, GA., July 31.

Editor Manufacturers' Record:

I took a trip today along the Georgia Midland & Gulf Railroad, running from Columbus through Griffin to McDonough, ninety-eight miles long, under the able management of Mr. C. W. Cheers. Georgia is one of the best "all-around" fruit States in the United States, and thus one of the fruit sections. There are peach States, grape, apple, orange and melon States, but Georgia raises all in superiority except oranges. The best fruit region of Georgia lies in the middle and southwestern parts of the State, and the section lying on this railroad by Warm Springs is among the best. Its soil and climate are especially suited to melons, grapes and peaches, and the pine ridge on which this resort is located is especially suited for fruit, as the elevation of 1200 feet above the sea level diminishes the risk of frost.

At Concord all the farmers have vineyards and peach orchards, and this year the shipment of grapes alone will run to fifteen carloads, while heavy shipments of strawberries were made earlier, and peach shipments have begun. There are vineyards of twenty-five acres and under, and one gentleman has fifty acres in Elberta peaches. The grapes are mainly Ives and Concord, and the profit on a basket has averaged twenty-five cents. Among the leading fruit-growers are the nursery firm of Smith Bros., J. B. C. Madden, H. C. Oxford, E. D. Matthews, McElveen & Hardage, P. W. Carter, J. W. McLendon, W. J. Newell, R. F. Strickland & Bro., H. H. Strickland, J. C. Montgomery & Bro., J. J. Rawes, J. C. Irvin, J. H. Lee, W. E. Lloyd and N. B. Woller.

This soil and climate seems to produce

fruit of remarkable flavor. The peach orchards are young and are just beginning to bear. Many packages are shipped by express, but the bulk of the crop goes by ordinary rail. At Neals, the next station, Captain Hodnett has shipped two carloads of his crop of Elberta peaches. Woodbury is another point where both grapes and Elberta peaches are raised. At Warm Springs Mr. Davis, the proprietor, has planted a fine vineyard.

This section has a great future before it, and it offers inducements to the fruit farmers of the North and West to come here.

I. W. AVERY.

THE MANUFACTURERS' RECORD is exciting considerable comment by its reiterated statements declaring that the manufacturers of this country must obtain a footing in foreign markets. This proposition would seem to be one requiring no advocacy, but such is not the case. There are many of our manufacturers who pretend, or have always pretended, that the home market was good enough for American industries, and the spirit which they have breathed has become a sort of tradition among the common people. It is true that most of the persons with views of that kind have been newcomers in the markets, so to speak, that is, have become manufacturers since the modern protective tariff was utilized for the benefit of our industries. But their influence has been the more marked, apparently, because they were unable to compete with foreigners if they should go to other countries. They were themselves the product of American protective laws, and without those laws such manufacturers could not hope to exist. But this spirit is changing with the approach of a period when all tariff rates shall be low. The MANUFACTURERS' RECORD has obtained the views of a number of producers in this line who believe that a new industrial period is at hand. They are ready with suggestions as to the best means of conquering the new markets, and, if we are to trust their observations, they are going out to secure the first fruits of victory with their own merchandise.—Providence (R. I.) Journal.

CHARLOTTE, N. C.—The Buford Hotel, Charlotte, N. C., has recently been remodeled and refitted, and is receiving a liberal share of patronage. The new proprietors, Messrs. Farintosh & Amer, are both experienced hotel men, and every department is in the hands of capable assistants.

THE *Southern States* magazine is read by thousands of farmers, fruit-growers, stock-raisers and business men in all the North, West and Northwest, who are looking to the South as a future home and are trying to inform themselves as to the relative advantages of different parts of the South. If you have farm, garden or orchard property for sale the *Southern States* will put you into communication with buyers. Send for sample copy and rates. Manufacturers' Record Publishing Co., Baltimore, Md.; Wm. H. Edmonds, editor and manager.

\$4 Excursion to Seashore, Fridays and Saturdays, via Pennsylvania Railroad.

On every Friday and Saturday until August 31, inclusive, the Pennsylvania Railroad Co. will sell at their Baltimore ticket offices excursion tickets to Atlantic City, Cape May or Sea Isle City, valid for going trip on trains leaving Union Station 10 55 A. M. and 12 05 noon, and good for return passage until following Tuesday, inclusive, at the rate of \$4 for the round trip.

Summer Vacation Tours.

The Baltimore & Ohio Railroad Co. now has on sale at all its offices east of the Ohio river a full line of tourist excursion tickets to all the lake, mountain and seashore resorts in the Eastern and Northern States, and in Canada. These tickets are valid for return journey until October 31. Before deciding upon your summer outing it would be well to consult the B. & O. book of "Routes and Rates for Summer Tours." All B. & O. ticket agents at principal points have them, and they will be sent postpaid upon receipt of ten cents by Chas. O. Scull, general passenger agent, B. & O. R. R., Baltimore, Md.

TABLE OF CONTENTS.

EDITORIAL	Page
Commendable Enterprise.....	17
The Need and Opportunity for Diversified Employment in the South.....	17
Improved Cotton-Baling.....	18
A Promising Outlook.....	18
The Atlanta Exposition.....	18
The South to the Front.....	19
Secretary Smith on the South.....	19
Iron Matters in Georgia.....	19
A Market in Japan.....	20
The Iron Situation.....	20
Modern Transportation.....	20
RAILROAD NEWS:	
An Old Story.....	21
150 Miles an Hour.....	21
Savannah to Montgomery.....	21
The Southern-Southern Pacific Scheme.....	21
Plans for a New System.....	21
Contract Awarded.....	21
Improving the Atlantic & Danville.....	21
Queenstown to Rehoboth.....	21
Railroad Notes.....	22
TEXTILES:	
Building Cotton Mills by Co-Operation.....	22
A Projected Cotton Mill in Alabama.....	22
Heavy Cotton Consumption.....	22
Six More Mills for the Carolinas.....	22
Large Additions to Mills.....	22
Textile Notes.....	22
FINANCIAL NEWS:	
A Good Record.....	23
Reducing Its Debt.....	23
Elyton Company's Organization.....	23
New Corporations.....	23
New Securities.....	23
Interest and Dividends.....	23
Financial Notes.....	23
Testing Carolina Gold Mines.....	23
LUMBER:	
Wants Timber Land.....	24
A Big Lumber Order.....	24
Lumber Market Reviews:	
Baltimore.....	24
Charleston.....	24
Savannah.....	24
Pensacola.....	24
Mobile.....	24
Beaumont.....	24
St. Louis.....	24
Lumber Notes.....	25
Iron Markets.....	25
MECHANICAL:	
Electric Railway Without Trolley (Illus.)... 26	
The Kuhlmann Pulley (Illus.).....	27
Pan-American Barrow (Illus.).....	27
Jeffrey Conveying Machinery for Coaling Vessels (Illus.).....	27
New Springfield Shaper (Illus.).....	28
Combination Foot Press (Illus.).....	28
COTTONSEED OIL:	
The Market for Cottonseed Products..... 29	
Cottonseed-Oil Notes.....	29
Wants Water-Power.....	29
PHOSPHATES:	
Phosphate Markets.....	29
Phosphate and Fertilizer Notes.....	29
CONSTRUCTION DEPARTMENT:	
New Enterprises.....	30
Building Notes.....	32
Railroad Construction.....	32
Machinery Wanted.....	33
Trade Notes.....	33
Trade Literature.....	34
A Favored Region.....	34

DREDGING. Will ask for bids shortly on about 64 miles of canals for draining large tract of Florida land. Companies wishing to bid please send in names to W. W. RUSSELL, P. O. Box 299, ORLANDO, FLA., or to A. O. RUSSELL, care of UNITED STATES PRINTING CO., CINCINNATI, OHIO.

MARBLE QUARRY

FOR SALE.

With over sixty acres of land (nearly all marble) with Derricks, Engines, Branch Railroad connecting with main line, all in successful operation, situate near KNOXVILLE, TENN. Everything in complete order and in first class condition. The quality of the marble is of a very high grade and commands a ready market everywhere. Old age and consequent infirmity on the part of the principal is the only reason for selling. A prompt purchaser will get a rare bargain on easy terms.

JAS. W. DRAPE,

424 Fourth Avenue, PITTSBURGH, PA.

\$100,000**7 Per Cent. Semi-Annual Dividend Stock**

THE ATLANTA LOAN & INVESTMENT CO., of Atlanta, Ga., a building and loan on banking lines, offer to the public a limited amount of its Permanent Capital Stock, guaranteed interest 7 Per Cent., and participating in addition to the interest in the net surplus of the company every two years. Refer to the Atlanta Trust & Banking Co., Merchants' Bank and American Trust & Banking Co., of Atlanta. Eastern correspondence desired. For full particulars address

ATLANTA LOAN & INVESTMENT CO.,
812 Equitable Building, Atlanta, Ga.

J. WM. MIDDENDORF.

Members Baltimore Stock Exchange.

WM. B. OLIVER.

MIDDENDORF, OLIVER & CO.

BANKERS AND BROKERS,
No. 213 E. German Street, [KEYSER BUILDING.] Baltimore, Md.
Stocks and Bonds Bought and Sold on Commission. Special attention given to Municipal and other investment loans. Dealers in Foreign Exchange. Drafts on Europe and Letters of Credit furnished.

CLAPP & COMPANY, BANKERS AND BROKERS,

Mills Building, NEW YORK.

STOCKS, COTTON, GRAIN.

Bank Stocks and Municipal Bonds Bought and Sold. Receive Deposits. Allow Interest.
PRIVATE TELEGRAPH WIRES. LONG DISTANCE TELEPHONE.

SOUTHERN SECURITIES

Bought and Sold.

We Buy Total Issues of
City, County, Water Company, Street Railroad

Bonds

CORRESPONDENCE SOLICITED.

N. W. HARRIS & CO.
BANKERS,

15 WALL STREET, NEW YORK.

163 & 165 Dearborn St., Chicago, 70 State St., Boston.

JOHN L. WILLIAMS & SONS,
BANKERS,

Dealers in RICHMOND, VA.

Southern Investment Securities,
MUNICIPAL BONDS A SPECIALTY.
Correspondence Invited.

Maryland Trust Co.

Corner South and German Sts.

BALTIMORE.

CAPITAL, - \$1,000,000.

A LEGAL DEPOSITORY FOR COURT AND TRUST FUNDS.

Acts as Financial Agent for States, Cities, Towns, Railroads and other Corporations. Transacts a general trust business. Lends money on approved security. Allows interest on special deposits. Acts as Trustee under Mortgages, Assignments and Deeds of Trust; as Agent for the Transfer or Registration of Stocks and Bonds, and for the payment of coupons, interest and dividends.

J. WILLCOX BROWN, PRESIDENT.

LLOYD L. JACKSON, VICE-PRES.

J. BERNARD SCOTT, Secretary and Treasurer.

DIRECTORS.

J. Willcox Brown, Leopold Strouse,
Wm. A. Marburg, Henry Walters,
H. J. Bowdoin, H. A. Parr,
Basil B. Gordon, B. N. Baker,
Lloyd L. Jackson, Andrew D. Jones,
Fred. M. Colston, James Bond,
Joshua Levering, Alexander Brown,
Frank Brown, T. K. Worthington,
W. B. Brooks, Jr., Clayton C. Hall,
Fredk. W. Wood, of Baltimore.
J. D. Baker, Frederick, Md.
August Belmont, New York.
John B. Garrett, Philadelphia.
A. A. H. Boissevain, London

THE VOUCHER SYSTEM OF BOOK-KEEPING.—Every progressive book-keeper and business man should have a copy of this book. THE VOUCHER SYSTEM is rapidly taking the place of all others, especially in manufacturing and wholesale concerns. SIMPLE AND COMPREHENSIVE. The only work ever published fully illustrating and explaining the Voucher System. Price \$2. Send for circulars.
ELECTRIC PUBLISHING CO., MANSFIELD, O.

Faithfulness Guaranteed.**Fidelity & Deposit Co. of Maryland**

Home Office, BALTIMORE.

Paid in Capital.....\$750,000 00
Surplus.....350,000 00
Reserve Requirement and undivided Profits.....237,767 00
\$1,337,767 00

Accepted by the United States Government as sole surety on Bonds of every description.

BECOMES SURETY ON BONDS of officers and employees of Banks, Railroad, Express and Telegraph Companies, Officials of States, Cities and Counties.
Bonds furnished for Executors, Administrators and all undertakings in Judicial Proceedings.

EDWIN WARFIELD, President.
HERMAN E. BOSLER, Secy. and Treas.

Notice to Capitalists.

Under authority of an Act of the General Assembly of Virginia, approved March 5, 1894, authorizing the town of Culpeper to borrow a sum of money not exceeding \$20,000, to be used for the purpose of erecting a system of water works for the said town, the undersigned are prepared to issue REGISTERED BONDS in denomination of \$500 each, aggregating the sum of \$20,000, Dated September 1st, 1895, and payable twenty years after date, with interest at six per cent. per annum, payable semi-annually, represented by coupons attached to the said Bonds. Although payable twenty years after date, these bonds may be paid at any time after five years from their date, at the option of the said town. The undersigned are authorized by the counsel of the said town to sell these Bonds to the highest bidder, reserving the right to reject any and all bids, and for that purpose will receive bids therefor until the 15TH DAY OF AUGUST, 1895.

Address all communications to A. M. ALLAN, Chairman of Finance Committee, Culpeper, Va.

A. M. ALLAN,
R. F. BOOTON, } Committee.
W. L. ROSSON

HOTEL POWHATAN

W. L. SHEPARD, Manager.

Charlestown, W. VA.

Finest Summer Resort
Offered to Baltimore.

NEW HOUSE—Elegantly Furnished.

Only three hours by the B. & O. R. R.
and the Norfolk & Western.
Six trains daily.

UNDER NEW MANAGEMENT.
First class table at reasonable rates.

If You Want to Know

Anything about the South, about its resources, the progress of its development, the establishment and growth of new enterprises, you can find it all in the MANUFACTURERS' RECORD, and only there. There is no other medium that will keep you so well posted about anything that pertains to the South.

The MANUFACTURERS' RECORD is published weekly, and will be mailed to you one year for Four dollars, six months for Two dollars, or three months for One dollar. Sample copies free.

BALTIMORE, MD.

H. W. JOHNS' ASBESTOS SECTIONAL PIPE COVERINGS.

NON-CONDUCTING COVERINGS FOR STEAM AND HOT WATER PIPES, BOILERS ETC.

READILY ATTACHED OR REMOVED BY ANY ONE. ASBESTOS BOILER COVERINGS

WE ARE PREPARED TO TAKE CONTRACTS FOR APPLYING STEAM PIPE AND BOILER COVERINGS IN ANY PART OF THE UNITED STATES.

H. W. JOHNS ASBESTOS MILLBOARD, SHEATHINGS, BUILDING FELTS, FIRE PROOF PAINTS, LIQUID PAINTS, ASBESTOS ROOFING, ETC.

H. W. JOHNS MANUFACTURING COMPANY,

87 MAIDEN LANE, N.Y. JERSEY CITY, CHICAGO, PHILADELPHIA, BOSTON, LONDON

Creamery Machinery, Dairy Apparatus and Supplies.

Everything pertaining to butter and cheese making. Complete creamery plants built and furnished with the latest improved machinery. Correspondence solicited. Send for illustrated catalogue to

John S. Carter's Dairy Supply House,
SYRACUSE, N. Y.

Ross-Meehan Foundry Co.

General Founders and Machinists,



BELL DEPARTMENT.

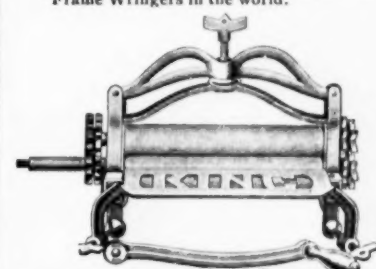
Steel,
Church
School
and Farm

Bells and Gongs

CHATTANOOGA, TENN.

WRINGERS

We are the largest manufacturers of Iron Frame Wringers in the world.

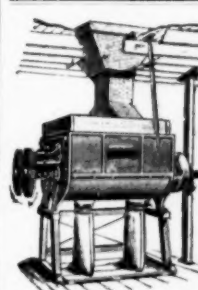


ABSOLUTELY INDESTRUCTIBLE.
Neither absorbs grease nor stains clothes.
Always perfectly clean.
Warranted for one year.

Dealers address

NATIONAL WRINGER CO.

Canton, Ohio.



THE BROUGHTON
DRY MIXER,
FOR
Hard Plaster, Cement, Paint, &c.

W. D. DUNNING,
196 W. Water St.
SYRACUSE, N. Y.

The Boomer & Boschert HYDRAULIC PRESS

FOR BALING
Cloth, Paper, Yarn, &c.
Or for any other purpose requiring great pressure.

BOOMER & BOSCHERT PRESS CO.

386 W. Water St. SYRACUSE, N. Y.

SPECIAL Advertisements OF GENERAL Interest.

OPPORTUNITIES FOR INVESTORS.

JACKSONVILLE, FLA., U. S. A.

This city, the metropolis of the State, offers good openings to those who will start factories. Industries of all kinds desired. Raw materials—PINE, CYPRESS and HARDWOODS; KAOLIN, CLAY, PHOSPHATE, CEMENT & FULLER'S EARTH; Fruits and Vegetables, Cotton, Corn and Tobacco, Fibre and Moss. All information cheerfully given. Address WILL HUBER, opp. postoffice, Jacksonville, Fla., U. S. A.

WANTED.

PARTY WITH \$10,000

To take an active interest in an established manufacturing business for purpose of increasing same so as to be able to fill orders. An exceptional opportunity for the right man. Address the YOUNG MEN'S BUSINESS LEAGUE, Augusta, Ga.

\$30,000 WANTED

For TEN years

At 5 per cent. per annum.
Approved Security. First
Mortgage on real estate in
the City of Tampa, Fla.

For details write to

SOLON B. TURMAN,
TAMPA, FLA.

FOR SALE OR LEASE.—Marble Mill and Forty Acres of Finest Tennessee Marble. One quarry, twenty acres of Pink Marble. Mill located at Loudon, Tenn. Buildings nearly new and in good repair. All machinery in first-class condition. Mill has been running up to December 1st, 1904. Has river and railroad facilities. Will sell mill separate from quarries if so desired.

Address
H. H. SUTTON, AURORA, IND.

FOR SALE

AT A

GREAT BARGAIN.

The Baxter Stove Works, Birmingham, Ala. Railroad connections with all the trunk lines. A complete outfit for manufacturing stoves, ranges, hollow ware, grates, etc., with a capacity for working one hundred moulders. For particulars and terms write to

J. F. B. JACKSON,
Birmingham, Ala.

Saw Mill FOR SALE

TO CLOSE AN ESTATE.

Almost new, Engine, Boiler, Band Mill, Lath and Picket Mill, Trucks, etc.
Also 6000 feet T Rails.
Sold at a bargain on very easy terms.
Address

WOOLVERTON & TINSMAN,
WILLIAMSPORT, PA

A Grand Opportunity

For Investment.

TIMBER LAND FOR SALE

IN

NORTH CAROLINA.

A tract containing 2627½ Acres of fine Timbered Land in Catawba and Burk Counties.

On the land within one and a-half miles of a shipping point on Southern Railroad there are two fine water powers, each sufficient to create 500 horse power. The entire land is heavily timbered with North Carolina heart pine and oak, except about thirty-five acres. A good location for a Band Mill for a five years' run. There is also a mine of fine magnetic iron ore. The best location in the State. Correspondence solicited. Address Lock Box 67.

HICKORY, N. C.

FOR SALE.

Party wishing to retire from business desires to sell a Steam Feed and Grist Mill in a healthy and thriving city of 10,000 inhabitants in North Alabama. Established and profitable business. For particulars address

J. C. KEITH,
Anniston Ala.

FOR SALE.

North Carolina SAW MILL and four DRY KILNS.

Capacity of mill 30,000 to 40,000 feet daily. Cost \$25,000. Will sell for \$3000. Sufficient reasons given for selling. Address

S. P. RYLAND, Jr.,
21 S. Gay Street. BALTIMORE, MD.

FOR SALE.

A Magnificent Saw Mill

in South Georgia, complete. Daily capacity 50,000 feet 50,000 acres of Long-Leaf Yellow Pine timber at a bargain. Terms easy. Will take lumber in part payment. Address LAND TRUST CO. OF GEORGIA, 2½ South Broad Street, Atlanta, Ga.

Kaolin and Corundum

FOR SALE.

Fine and large bed of KAOLIN and the most extensive deposit of CORUNDUM ever found. For particulars write

F. R. HEWITT, Hewitt, Swain County, N. C.

FOR SALE.

REAL ESTATE in City, and Farms and Coal Lands; Fire-Brick Works, with its own coal and clay, on both river and railroad; Drug Store, and Feed and Commission House. The best location for any business on the Ohio river. Correspondence invited.

ALEX. POAGE,
ASHLAND, KY.

FOR SALE.

In a large growing Southern city of 75,000 inhabitants, a fine

STEAM LAUNDRY,

Making a Profit of \$10,000 a Year.

Good reasons for selling. Do not answer unless you have money to buy and mean business. It is a chance of a lifetime for a man who wants an old-established and good-paying business. For full particulars address D 7½.

Manufacturers' Record.

FOR SALE.

A Handsome, Large

Modern Residence

And a Beautiful Old

Colonial Residence

with modern conveniences, both in the city of Charleston, S. C. The City of Charleston water supply is obtained from artesian wells, and it has recently been proven to be a valuable dyspeptic cure and a rheumatic cure when bathed in. Both of these residences are supplied with this water.

Timber and Farming Lands and Rice Plantations

situated in Colleton and Berkeley Counties. For further particulars address

Exchange Banking & Trust Co.
Charleston, S. C.

ARE YOU INTERESTED IN THE SOUTH?

If so, you cannot afford to miss reading the MANUFACTURERS' RECORD every week. We want your subscription. Price \$4.00 a year. Subscribe TO-DAY.

OFFICES IN BALTIMORE.

Business men desiring to open offices in Baltimore will find in the

MANUFACTURERS' RECORD
BUILDING

superior advantages in location, comfort and convenience.

The building is modern in every respect; furnished throughout in quartered oak; steam heat, electric and gas lights, quick elevator service, mail chute, etc.

LOCATION,

corner Lexington and North streets, diagonally opposite the City Hall and Postoffice, and immediately facing the temporary Courthouse, which will be occupied for the next five years. All the principal street car lines pass within one square, giving quick access to every part of the city.

Considering the location, conveniences and services, these are the cheapest offices in Baltimore.

Light, heat and janitor service free. Inspection invited.

MANUFACTURERS' RECORD PUB. CO.

FOR SALE

At a large reduction,

One Carload strictly first-class Heavy Deadening Felt.

Must be sold at once.

Address S. P. C., care Manufacturers' Record.

Cotton Compress

FOR SALE.

One CURRY COMPRESS at a Great Bargain. Address
JEFFERSON COUNTY SAVINGS BANK,
Birmingham, Ala.

FURNACE EQUIPMENT.

Two Large Furnace Stacks, 60 feet high.
Two Large Upright Blowing Engines.
Two Large Batteries of Boilers.
One Air Compressor. Pneumatic Hoist.
Hoisting Engines, Pumps, etc.
Three Standard Gauge Locomotives, 30, 20, 10 ton
One 36 in. Gauge Mine Locomotive.
For sale cheap.

POULTERER & CO.

206 Bullitt Building, PHILADELPHIA, PA.

Wood Working MACHINERY FOR SALE.

The following wood working machinery, which has been in use in the manufacture of wagons, is offered for sale at a bargain. The machines are all from the well-known firm of J. A. Fay & Co., Cincinnati, and are guaranteed in good order:

One Scroll Saw, No. 7230.
One Tenoning Machine, No. 8127.
One Rounder, No. 6917.
One Mortising and Boring Machine, No. 5599.
One Planer—dresses four sides at once—20 in., No. 13653.
One Planer and Joiner, No. 6365.
One Boxing Machine, No. 15,857.
One Cut-off Saw, 18 inch.
One Rip Saw on table.

Also 101 feet of 1 1/2 x 16 inch Shafting, with eight pulleys, two drop hangers and eight post hangers. Also the Engine and Boiler used to operate this machinery. This lot of machinery will be sold very cheap, either as a whole or separately if desired. Bids and correspondence solicited. Address

DANIEL PARTRIDGE,
President Canning Manufacturing Co.
SELMA, ALA.

Second-Hand Flour Mill Machinery

Eight pairs 7x14 in. Roller Mills.
Six Round Reel Flour Dressers.
One Howes Jewel Flour Packer, with all tubes.
One Howes No. O Wheat Scourer and Polisher.
One 25-h.p. Engine and Boiler.
Send for complete list and prices to
WOLF MILL FURNISHING CO.
ALLENTOWN, PA.

One Diamond Drill

For Sale for One-third its Value.

Apply to

G. T. WILLIAMS,
CASANOVA, VA

SECOND-HAND MACHINERY

Complete Outfit

OF THE

Boston & Albany Railroad Springfield Shop.

Also Large Stock other MACHINERY, New and Second-Hand.

Write for List. Prices on application.

Eastern Branch

NILES TOOL WORKS CO.

136 and 138 Liberty Street,
NEW YORK.

Second Hand TOOLS

LATHES.

1 12x 4 Putnam Lathe.
1 14x 4 Putnam Lathe.
1 18x 8 Pratt & Whitney Lathe.
1 18x 8 Lodge & Barker Lathe.
1 18x12 Lodge & Barker Lathe.
1 19x11 Lodge & Davis Lathe.
1 20x 8 Niles Lathe.
1 20x 8 Sellers Lathe.
1 20x12 Muller Lathe.
1 20x14 Sellers Lathe.
1 22x10 Niles Lathe.
1 24x16 Sellers Lathe.
1 24x18 Leonard Lathe.
1 26x13 Gleason Lathe.
1 26x20 Pond Lathe.
1 30x22 Pond Lathe.
1 30x28 Sellers Lathe.
1 34x14 Steptoe Lathe.
1 42x24 Putnam Lathe.

PLANERS.

1 15x15x3 New Haven Planer.
1 16x16x 3 Pratt & Whitney Planer.
1 24x24x5 New Haven Planer.
1 24x24x6 Bancroft Planer.
1 24x24x7 New Haven Planer.
1 25x25x0 Bancroft Planer.
1 26x26x 6 Lodge & Davis Planer.
1 30x30x7 Sellers Planer.
1 30x30x10 Bement Miles Planer.
1 34x34x7 New Haven Planer.
1 36x36x8 Niles Planer.
1 36x36x10 Whitcomb Planer.

DRILLS.

1 5 ft. Niles Plain Radial Drill.
1 6 ft. Lodge & Davis Radial Drill.
1 16 in. Blaisdel Drill.
1 20 in. Lodge & Davis Sliding Head Drill.
1 20 in. Prentice Drill.

SHAPERS.

1 8 in. Crank Shaper.
1 15 in. Traveling Head Shaper.
1 16 in. Lodge & Davis Shaper.
1 20 in. Lodge & Davis Crank Shaper.
1 26 in. Lodge & Davis Geared Shaper

MILLING MACHINES.

1 No. 4 Brainerd Milling Machine.
1 No. 3 Garvin Milling Machine.
1 Kempsmith Milling Machine.

MISCELLANEOUS.

1 8 ft. Greenwood Boring Mill.
1 18 in. Turret Chucking Lathe.

NEW TOOLS.

Engine Lathes 14 to 40 in. swing.
Planers 24 to 54 in. wide.
Drill Press 12 to 42 in. swing.
Radial Drills 3, 4, 5 and 6 ft. arms
Shapers 14, 16, 21 and 26 in. stroke.
Plain Milling Machines (4 sizes)
Universal Milling Machines (3 sizes).
¾, 1, 1½, 1¾ and 2 in. Screw Machines.
12, 15 and 18 in. Monitor Lathes.
12, 14 and 15 in. Hand Lathes.
1½ in. and 2 in. Automatic Bolt Cutters.

THE LODGE & DAVIS
MACHINE TOOL CO.
CINCINNATI, OHIO, U. S. A.